BOARD OF APPEALS

Date Filed: August 28, 2023

City & County of San Francisco

REHEARING REQUEST FOR APPEAL NO. 23-034

Mid-Sunset Neighborhood Association, Inc, Appellant(s), seeks a rehearing of **Appeal No**. **23-034** which was decided on **August 16, 2023.** This request for rehearing will be considered by the Board of Appeals on Wednesday, **September 13, 2023**, at 5:00 p.m. **and will be held in Room 416 of San Francisco City Hall, 1 Dr. Carlton B. Goodlett Place. The parties may also attend via Zoom.**

Pursuant to Article V, § 9 of the Rules of the Board of Appeals, the **response** to the written request for rehearing must be submitted by the opposing party and/or Department no later than **10 days from the date of filing, by 4:30 p.m. on or before September 7, 2023,** and must not exceed six (6) double-spaced pages in length, with unlimited exhibits. The brief shall be double-spaced with a minimum 12-point font size. An electronic copy should be e-mailed to: boardofappeals@sfgov.org, julie.rosenberg@sfgov.org, and enochwang@fifelawllp.com.

You or your representative **MUST** be present at the hearing. It is the general practice of the Board that only up to three minutes of testimony from each side will be allowed. Public Comment will be permitted. Except in extraordinary cases, and to prevent manifest injustice, the Board may grant a Rehearing Request only upon a showing that new or different material facts or circumstances have arisen, where such facts or circumstances, if known at the time, could have affected the outcome of the original hearing.

Based on the evidence and testimony submitted, the Board will make a decision to either grant or deny your request. Four votes are necessary to grant a rehearing. If your request is denied, a rehearing will not be scheduled and the decision of the Board will become final. If your request is granted, a rehearing will be scheduled, the original decision of the Board will be set aside, and after the rehearing, a second decision will be made. Only one request for rehearing and one rehearing are permitted under the Rules of the Board.

Requestor or Agent

Signature: Via Email

Print Name: Enoch Wang, attorney for appellant

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BOARD OF APPEALS

CITY AND COUNTY OF SAN FRANCISCO

MID-SUNSET NEIGHBORHOOD ASSOCIATION, INC., Appellant, v. DEPARTMENT OF BUILDING INSPECTION, Respondent.	Appeal No. 23-034 **APPELLANT MID-SUNSET NEIGHBORHOOD ASSOCIATION, INC.'S BRIEF IN SUPPORT OF REHEARING REQUEST**

Appellant Mid-Sunset Neighborhood Association, Inc. (MSNA) is requesting a rehearing on its appeal of the building permit issued by DBI to permitholder Tenderloin Neighborhood Development Corporation (TNDC) (Permit No. 202205053630). Hearing was held on August 16, 2023 before the Board of Appeals. The vote was deadlocked 2-2, and therefore the permit was approved by operation of law and the appeal denied. President Swig was not present at the hearing.

<u>Grounds For Rehearing</u>

"Except in extraordinary cases, ***and to prevent manifest injustice***, the Board may grant a Rehearing Request only upon a showing that new or different material facts or circumstances have arisen, where such facts or circumstances, if known at the time, could have affected the outcome of the original hearing. The written request shall state:

(i) the nature and character of the new facts or circumstances;

(ii) the names of the witnesses and/or a description of the documents to be produced; and

(iii) why the evidence was not produced at the original hearing." (Rules of the Board of Appeals, Article V, section 9) (emphasis added).

Rehearing is Warranted to Prevent Manifest Injustice

At the August 16, 2023 hearing, State Department of Toxic Substances Control (DTSC) witnesses were allowed time to testify far exceeding the time allocated to MSNA's experts. Because of the imbalance of time allocated, MSNA did not have the opportunity to demonstrate, importantly, that:

(1) Removing the existing soil vapor at 2550 Irving Street (the "site") through soil vapor extraction (SVE) would have a <u>substantial</u> <u>and</u> <u>measurable</u> <u>impact</u> on reducing the overall PCE soil vapor contamination in the surrounding neighborhood.

(2) Conversely, if the existing measured soil vapor onsite is allowed to remain without SVE in place prior to construction, the contamination will remain on the property through construction and continue to pose a risk to neighboring homes.

Remediating the other parcels or right of ways in the area first will not eliminate or make unnecessary remediation at the site. It will be significantly more expensive to remediate the contamination currently existing at the site if construction is commenced without first installing a SVE remediation system.

(3) The six homes where there has been indoor air testing are not the only homes that are likely currently being affected by the PCE contamination vapor intrusion given the findings to date and the PCE soil vapor contour map, which MSNA expert Don Moore, PG, who was unable to attend the August 16 hearing, will be able to present in detail. Mr. Moore's map shows that the PCE soil vapor plume is beneath at least 40 residential and commercial properties above DTSC's health-based screening level, and the map has been verified to be accurate by DTSC. Mr. Moore will also testify how DTSC's recent investigation approach to the former Miracle Cleaners location at the 2550 Irving site was designed not to find PCE and if any was found, it would not have been actionable based on DTSC setting an unattainable standard to define a "source."

It was asked by Vice President Lopez, what is different between February 2023, when the earlier hearings were held, and August 2023 in terms of contamination? The third round of indoor air sampling was not available when the February 2023 hearings were held. The cancer cluster map had also not been updated with new cases.

The third round of testing is indicative that the same PCE vapor which caused the closure of a significant portion of the building at the site by the Police Credit Union in 2019 will not go away on its own or lower to safe risk levels if left unremediated. These levels have been relatively consistent and persisted now through three rounds of testing. Vapor mitigation at the site will only protect the site's future residents by keeping PCE soil vapor out. It will at most marginally decrease existing soil vapor measured at the property but will not keep soil vapor continuing to spread *from the site* to the neighboring properties.

Because of the time allocated, MSNA experts also did not have the opportunity at the August 16 hearing to demonstrate that DTSC testimony was out of sync with adopted DTSC guidance on the following important areas:

1. Determining the reasonable maximum exposure of neighboring households;
2. Taking action before full characterization of the neighborhood;
3. The preference for permanent remediation over mitigation; and
4. Community engagement.

<u>Witnesses and Exhibits To Be Presented at Rehearing</u>

On August 14, 2023, DTSC officials met with residents of six neighborhood homes where indoor air sampling had been done. Three rounds of testing had taken place, with the last round in February 2023 after the hearings on MSNA's appeal of the demolition permit had concluded. During this meeting, DTSC gave a PowerPoint presentation regarding its conclusions of the indoor air testing.

The conclusions were clearly erroneous. They expressed DTSC's opinion that the levels of indoor air contamination did not exceed a risk level that presented a significant risk to human health. This contradicts credible, expert medical opinion. The methodology employed for determination of reasonable maximum exposure was also inconsistent with adopted DTSC guidance.

Because the conclusions were not presented until two days before the hearing, there was not time to incorporate important contrary evidence into written briefing or sufficient time to prepare and present this evidence to the Board.

If rehearing is allowed, Lenny Siegel, MSNA's vapor intrusion expert, would testify regarding DTSC guidance on determination of reasonable maximum exposure for neighboring households and the inconsistencies in DTSC methodology employed at the site. Mr. Siegel would also testify in greater detail regarding the significance of the three rounds of indoor air testing at the six neighboring homes. Timur Durrani, MD, MSNA's expert toxicologist, would testify regarding the findings and the health impacts.

Mr. Siegel would also testify regarding DTSC guidance on (1) approving a response action before full characterization of the neighborhood is complete, (2) the preference for permanent remediation, and (3) community engagement. Each of these were important areas where DTSC testimony at the August 16 hearing highlighted inadequacies in the actions taken by DTSC since the February hearings. Mr. Siegel, Mr. Moore, and Dan Grasmick, PE, will compare the actions taken at the site by DTSC with their established guidance, and as compared to other sites.

On August 15, 2023, only one day before the Board of Appeals hearing, DTSC officials met with MSNA representatives to discuss the letter submitted by MSNA to DTSC on July 10, 2023. While MSNA requested the meeting to be scheduled earlier so that it would be able to assess and incorporate DTSC's responses into its presentation before the Board, it was unable to do so because the meeting was held only one day before the hearing and did not conclude until late afternoon.

In the August 15 meeting, DTSC raised questions and concerns regarding MSNA's proposed SVE, including "too little mass" and the "rebound effect". It also expressed concern that SVE may "pull" soil vapor onto other properties or onto the street.

If rehearing is allowed, Mr. Grasmick will testify that these are not valid concerns. Designed properly and pilot tested, the SVE system would have a high rate of efficacy. It would not "pull" any soil vapor onto other properties, and there would be no significant "rebound effect". Mr. Grasmick will testify that setting up an SVE system and pilot testing to determine radius of influence for full scale design can be completed in 30-60 days. This timeline for installation and testing is well in advance of the anticipated start date of construction in the spring of 2024. Depending on actual start date of construction, the SVE system can then be run for as long as 4-6 months before construction begins. This is long enough to have a measurable reduction in the soil vapor on site. SVE can then be resumed after construction is substantially complete.

Mr. Grasmick will testify that waiting for construction to be completed or waiting until additional testing and/or remediation on other properties has been completed before remediating at 2550 Irving is far less effective than implementing SVE prior to construction. It will be significantly more expensive to install SVE after construction is completed. There is no benefit whatsoever to delay remediation, only the cost and detriment of continuing, ongoing soil vapor contamination emanating from the property into the neighboring properties. This level of contamination will not go away on its own or through VIMS, which is the currently approved mitigation in the Site Management Plan. Monitoring will be required at all the properties regardless of which parcel or right of way is remediated first.

Mr. Grasmick will also testify regarding DTSC guidance on "source" definition. He will testify that DTSC testimony at the August 16 hearing regarding "source" was unconventional and out of sync with DTSC guidance and treatment at other sites.

The Board has jurisdiction and the authority to condition construction on installation of a remediation system prior to beginning construction particularly where the installation will not cause delay to the project.

Appellant Mid-Sunset Neighborhood Association, Inc. respectfully requests that the Board grant its request for rehearing.

Date: August 28, 2023 FIFE LAW, LLP

By ____________________
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BOARD OF APPEALS

CITY AND COUNTY OF SAN FRANCISCO

MID-SUNSET NEIGHBORHOOD ASSOCIATION, INC., Appellant, v. DEPARTMENT OF BUILDING INSPECTION, Respondent.	Appeal No. 23-034 **DECLARATION OF LENNY SIEGEL IN SUPPORT OF APPELLANT MID-SUNSET NEIGHBORHOOD ASSOCIATION, INC.'S REQUEST FOR REHEARING**

I, Lenny Siegel, declare:

1. I have been Executive Director of the Center for Public Environmental Oversight, which was originally a project of San Francisco State University, since 1994. I have been recognized as one of the American environmental movement's leading experts on both the vapor intrusion pathway and military facility contamination, having provided technical assistance to and visited scores of community organizations across the U.S. I have served on several ITRC (Interstate Technology & Regulatory Council) work teams on environmental remediation, including Vapor Intrusion Mitigation, and a dozen National Research Council committees addressing military environmental issues.

2. For more than twenty years, I have provided input to DTSC and other state agencies on the language in multiple guidance documents addressing vapor intrusion, as a member of DTSC advisory groups, in written comments, and at public meetings and workshops.

3. I have received recognition as one of the South Bay Area's leading advocates for

the development of affordable housing, having served on the Mountain View City Council from 2015-2018 (Mayor in 2018). Since 2017 I have served on Santa Clara County's Housing Bond Oversight Committee, considered a model – by the county's Civil Grand Jury, among others – for the effective oversight of affordable housing development.

4. As consultant for Mid-Sunset Neighborhood Association, Inc. (MSNA), I am familiar with the development at 2550 Irving Street in San Francisco, and the environmental issues regarding the PCE contamination found on-site. I testified in front of the Board in February 2023 and at the August 16, 2023 hearing. The facts contained in this declaration are based on my own personal knowledge and experience, and if I were called and sworn as a witness I could and would testify competently thereto.

5. I attended the August 16 Board of Appeals (BOA) hearing, and I heard and saw all the testimony, including the lengthy assertions by representatives of the Department of Toxic Substances Control. DTSC went to great lengths to justify its failure to take action to adequately protect current and future residents of the area centered on 2500 Irving Street from PCE exposure, but I was not given sufficient time at the hearing to rebut DTSC's assertions, some of which run counter to DTSC's published guidance.

6. DTSC's lengthy report on "Off-Site Residential Indoor Air," a true and correct copy of which is attached as **Exhibit A**, was not made available until August 11th, after briefs for the appeal were filed, and DTSC made its PowerPoint presentation—the one which was cited at the August 16th BOA hearing—to neighborhood residents in a closed meeting the evening of August 14th. Thus, I was unable to submit a written critique.

7. I am prepared to show that DTSC's failure to initiate or require subsurface remediation is inconsistent with official DTSC guidance documents. Furthermore, I am prepared to challenge its claim that "vapor intrusion risk from sub-surface PCE is low or insignificant for all [nearby residential] properties." Finally, I am prepared to show that DTSC's failure to adequately engage the community not only ignored its assurances to the Board of Appeals but DTSC's own policies.

8. At the hearing, a DTSC representative stated, "You have to fully characterize the area you're treating before you choose and pick that remedy." While regulatory agencies tend not to approve ***final*** Response Plans until characterization is "complete," it is common to approve and conduct Interim Remedial Actions. The "Proven Technologies Guidance" (p.47) states, "To provide near term reduction of cVOC [chlorinated volatile organic compounds including PCE)] mass posing a risk to human health, the environment, and/or groundwater, SVE [Soil Vapor Extraction] is often implemented as an interim removal action (also referred to as an interim measure under some cleanup processes) taken prior to selection and implementation of the final remedy."

9. In fact, DTSC did approve the September 2021 TNDC Response Plan, a plan that did not include Soil Vapor Extraction, before the area was sufficiently characterized.

10. The timeline is as follows:

<u>July, 2020</u>. The Police Credit Union executes a Voluntary Cleanup Agreement with DTSC, an agreement that it pulls out of in January, 2022.

<u>September, 2020</u>. The Police Credit Union's consultant, AllWest Environmental, finds PCE far above the screening level in the soil gas in front of adjacent homes. The results are published in November, 2020. This suggests the need to sample inside those homes.

<u>January-February, 2021</u>. DTSC and TNDC sign a CLRRA (California Land Reuse and Revitalization Act) agreement for 2550 Irving.

<u>September 2, 2021</u>. TNDC submits and DTSC approves a response plan for 2550 Irving.

<u>September 7, 2021</u>. AllWest begins indoor air sampling in six adjacent homes, following a workplan submitted to DTSC on <u>August 24, 2021</u>.

11. Clearly the area was not fully characterized -- no samples had been taken inside neighboring homes -- when DTSC approved TNDC's remedy. Indeed, many other homes located above the PCE soil gas plume have never been sampled. DTSC may argue that CLRRA provided a justification for selecting a final remedy before full characterization, but I suggest that the CLRRA agreement should either have been delayed or should have contained a clause authorizing re-opening of the remedy selection based upon additional findings of contamination.

12. At the August 16th hearing, DTSC argued that SVE at this time could provide only temporary relief because contamination from remote sources could re-establish itself. In support of this argument, DTSC reported that there were numerous nearby businesses (current and former) that could be sources of PCE at 2550 Irving. Attached as **Exhibit B** is a true and correct copy of DTSC's map that was presented to the neighborhood in 2022. At least one of those businesses is downgradient (downhill underground) from 2550 Irving Street, so it could not be such a source.

13. It is implausible that any of them, other than those properties on the 2500 block of Irving Street, could be a source of soil gas migration, because of the declining soil gas concentrations shown as one moves away from the 2500 block of Irving. The only plausible pathway from remote sources is through leaks in the Irving Street sewer line. It would be quite a coincidence that such a leak occurred in front of two former dry cleaners, but even if it did, conducting soil vapor extraction would not pull PCE contamination from those potential remote sources unless they were currently releasing PCE into the sewer line, and there is no evidence that any upgradient business is currently using PCE. (The State of California has phased out its use.)

14. DTSC's refusal to recommend remediation, or even mitigation of adjacent homes, is based on its unjustified assertion of insignificant exposures. DTSC's report on residential indoor air, as summarized in the August 14th presentation, appears to deliberately understate the prevalence of unacceptable levels of vapor intrusion in the six homes sampled. (It inappropriately rules out vapor intrusion at other nearby homes because no one has sampled the indoor air at the other homes within the contour line of the PCE residential soil gas screening level of $16 \mu g/m^3$.)

15. In its report, DTSC ignores the real-time sampling, conducted with a Hapsite device by AllWest for the Police Credit Union in September 2021. Two homes where DTSC now concludes vapor intrusion was not occurring clearly had elevated levels of PCE coming from the subsurface, including the one where sealing the downstairs shower drain reduced PCE concentrations.

16. In the "Off-Site Residential Indoor Air" report's Table 4, a true and correct copy of which is attached as **Exhibit C**, DTSC used averaging (arithmetic mean) to minimize the reported indoor air concentrations in the houses. Under the concept of Reasonable Maximum Exposure, more than two sampling events are necessary before averaging is even considered.

17. DTSC/CalEPA's February 2023 "Supplemental Guidance" (p. 42) states, "The maximum concentration should be used to estimate risk until sufficient indoor air data has been collected…. Averaging over time should only occur if indoor air concentrations are relatively stable and/or decreasing."

18. At the August 16th hearing, a DTSC representative referred to the decision-making criteria used by EPA and DTSC in selecting environmental remedies. The "Supplemental Guidance" (p. 50) lists the most important of those criteria:

- Overall protection of human health and the environment;
- Long-term effectiveness and permanence;
- Short-term effectiveness;
- Reduction of toxicity, mobility, or volume;
- Community acceptance;
- Implementability; and
- Cost.

19. Note the inclusion of "community acceptance." While DTSC is not required to do what community members propose, it is obligated to engage in "two-way dialogue." Yet at the August 16th hearing, DTSC staff were unable to come up with any recent examples of community engagement other than their attendance at one of the February 2023 BOA hearings. The meeting of DTSC management with me and MSNA on August 15th was rescheduled by DTSC to occur after DTSC had already submitted its brief opposing MSNA's request for remediation before construction.

20. The same "Supplemental Guidance" (p.50) paragraph also states one of MSNA's main points: "Active remediation is the preferred response action to reduce or eliminate future

VI risk at buildings." Mitigation systems are valuable, but they are designed to prevent subsurface vapors from entering overlying buildings, not to treat or remove those vapors.

21. I believe in the scientific method. That doesn't mean that one accepts the conclusions of a scientist or government agency simply because they have credentials. It means testing their conclusions against the data and the literature on the subject.

22. My expertise is in explaining complex environmental phenomena, such as vapor intrusion, to the public at large. That is because non-scientists (or scientists with other areas of expertise) can make valuable contributions to environmental decision-making. That value is recognized by DTSC and other agencies in their guidance documents and often in their practices. Unfortunately, at 2550 Irving Street, DTSC seems to treat the neighborhood as an enemy.

23. I spend a good deal of my time advocating for the development of affordable housing. When I was first contacted by MSNA, they assured me that they were not against affordable housing in the Sunset. No doubt there are some residents who feel that way, but I believe the neighborhood has been unfairly stigmatized as NIMBY by San Francisco housing activists, government officials, and element of the news media. I find it unfortunate that the enthusiasm for building affordable housing has created a situation in which people who cannot afford to choose where they live may in the long run be exposed to unacceptable levels of toxic vapors. Vapor mitigation is good as long as it is working as designed, but it requires long-term management for the life of the contamination, or the building.

24. Finally, as a housing advocate, I believe it is important to consider neighbors' concerns when proposing affordable housing. Failure to consider valid concerns, such as environmental contamination, will undermine public support for the housing that our region needs.

I hereby declare under penalty of perjury under the laws of the State of California that this declaration is true and correct, and that it was executed on this 28th day of August, 2023, in Mountain View, California.

Lenny Siegel

Lenny Siegel

EXHIBIT A

Off-Site Residential Indoor Air and Soil Vapor Report – March 2022 and February 2023

2500 – 2550 Irving Street Sites
San Francisco, California 94122
Site Code: 202402

August 11, 2023

Prepared by:

Department of Toxic Substances Control – Site Mitigation and Restoration Program
700 Heinz Avenue, Suite 200
Berkeley, California 94710

Off-Site Residential Indoor Air and Soil Vapor Report – March 2022 and February 2023

2500 – 2550 Irving Street Sites
San Francisco, California 94122
Site Code: 202402

August 11, 2023

Prepared by:

Dennis Palacios
Engineering Geologist

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Acronyms and Abbreviations

µg/m³	micrograms per cubic meter
AllWest	AllWest Environmental, Inc.
ASTM	American Society for Testing and Materials
bgs	below ground surface
CLRRA	California Land Reuse and Revitalization Act
COC	chain of custody
CPEO	Center for Public Environmental Oversight
CRWQCB	California Regional Water Quality Control Board
DTSC	Department of Toxic Substances Control
DTSC SL	DTSC-modified residential screening level
ELAP	Environmental Laboratory Accreditation Program
GC-MS	gas chromatograph-mass spectrometer
HERO	DTSC Human and Ecological Risk Office
HHRA	human health risk assessment
HSC	Health and Safety Code
HVAC	heating, ventilation, and air conditioning
in. Hg	inches of mercury
mL/min	milliliter per minute
MSNA	Mid Sunset Neighborhood Association
Pace	Pace Analytical
ppb	parts per billion
PCE	tetrachloroethene
PID	photoionization detector
PRP	Potentially Responsible Party
RMD	RMD Environmental Solutions, Inc.
RSL	regional screening level
SIM	selective ion methodology
SRA	Site Remediation Account
SVA	standard voluntary agreement
TCE	trichloroethene
TNDC	Tenderloin Neighborhood Development Corporation
TOV	total organic vapors
TPCU	The Police Credit Union
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOC	volatile organic compound

Executive Summary

The Department of Toxic Substances Control (DTSC) protects the people of California and the environment from the harmful effects of toxic substances, in part by investigating releases of hazardous substances.

When a release of a hazardous substance has occurred or is about to occur, Health and Safety Code (HSC) Section 25358.3(b)(1), authorizes DTSC to undertake those investigations, monitoring, surveys, testing, and other information gathering necessary to identify the existence, source, nature, and extent of the hazardous substances involved and the extent of danger to the public health or environment. HSC Section 25355.5(c) authorizes DTSC to expend funds from the state account upon appropriation by the Legislature to conduct activities necessary to verify that an uncontrolled release of hazardous substances has occurred at a suspected hazardous substance release site. DTSC has undertaken the sampling outlined in this report pursuant to these authorities.

The properties evaluated in this report are located at 1271, 1275, and 1281 26th Avenue and 1276, 1280, and 1284 27th Avenue in San Francisco, California. Initial sampling of the properties occurred under a Standard Voluntary Agreement (SVA), entered into on July 6, 2020, by DTSC and The Police Credit Union (TPCU) pursuant to HSC Section 25355.5(a)(1(C). The purpose of the agreement was to investigate, evaluate, and/or remediate a release, threatened release, or potential release from 2500-2550 and 2525 Irving St., including any offsite areas to which hazardous substances may have migrated. The SVA also provided a mechanism for DTSC to recover its oversight costs.

The initial sampling conducted under the SVA in September and October 2021 indicated that tetrachloroethene (PCE) was detected in the samples from the six residences. However, prior to the collection of the samples, household chemicals were not removed from the residences and ventilation was not restricted; therefore, the data from this event are not considered representative and additional indoor air evaluation was warranted.

In February 2022, TPCU terminated the SVA and ceased to conduct further assessment. In response to community concerns, DTSC requested Site Remediation Account (SRA) funds to conduct additional monitoring in six residential properties north of 2550 Irving Street.

In March 2022 and February 2023, DTSC collected offsite indoor air samples, outdoor ambient air samples, and soil vapor samples for volatile organic compound (VOC) analysis (Offsite Investigation). The six offsite residential properties located north of the Site on 26th and 27th Avenues were evaluated.

The data from the Offsite Investigation were compared to conservative DTSC screening levels based on default, upper-bound assumptions of exposure and toxicity. The presence of chemicals at concentrations greater than their respective screening levels does not necessarily indicate that adverse impacts are occurring or will occur but does suggest that further evaluation of potential human health risk may be warranted.

Concentrations exceeded the DTSC-modified residential air screening level of 0.46 µg/m^3 at four of the six residences during each sampling event. PCE was detected in all indoor air samples during both sampling events. The concentration in indoor air was 2.01 µg/m^3 in March 2022. However, soil vapor data and remaining indoor air results from the same residence indicate that result is unlikely to be associated with vapor intrusion. For example, PCE was detected on the lower level of the residence at a lower concentration than the upper level in February 2023.

The results of the indoor air and soil vapor sampling indicate that vapor intrusion may be occurring at the six residential properties adjacent to the Site (property formerly owned by TPCU). The mean PCE concentrations were used to estimate vapor intrusion risks. Risk was assessed by dividing the mean indoor air concentrations of PCE by the DTSC residential screening level for the cancer endpoint (0.46 µg/m^3) and multiplying by $1x10^{-6}$. Using the screening level that is based on default, upper-bound assumptions of exposure and toxicity, the maximum estimated inhalation risk was $2x10^{-6}$ which is at the low end of the risk management range of $1x10^{-6}$ to $1x10^{-4}$ cited in the National Oil and Hazardous Substances Pollution Contingency Plan (1990) and incorporated in Chapter 6.8 Section 25356.1.5(a)(1) of the California Health and Safety Code (DTSC, 2022a).

The Offsite Investigation also indicated the following:

- PCE concentrations in soil vapor exceeded DTSC-modified screening level (15 micrograms per cubic meter [µg/m^3]) near the six residences during both sampling events.
- PCE was detected once at one of the three outdoor ambient air sampling locations.

While the estimated risks in the six residences were low and the estimated risk at only one residence slightly exceeded the point of departure, which is based on one in one million lifetime cancer risk ($1x10^{-6}$), DTSC is recommending follow up investigation. Out of an abundance of caution and in response to community concerns, DTSC recommends additional soil gas sampling at the existing wells on 26th and 27th Avenues during the dry season to assess seasonal variation in soil gas concentrations. Soil gas sampling should be conducted after the 2550 Irving Affordable Housing building is complete and soil gas concentrations equilibrate. In addition, DTSC recommends concurrent indoor air sampling at the two residences which showed the greatest variability in empirical attenuation factors (1275 26th Avenue and 1276 27th Avenue). DTSC will also continue overseeing investigation and mitigation activities at 2550 Irving Street, the Former Albrite Cleaners site, 2513 Irving Street, and 1300 26th Avenue.

Section 1.0 Introduction

In accordance with Health and Safety Code (HSC) Section 25355.5(a)(1)(C), Department of Toxic Substances Control (DTSC) and The Police Credit Union (TPCU) entered into a Standard Voluntary Agreement (SVA), regarding 2500-2550, and 2525 Irving Street (Properties), San Francisco, California, on July 6, 2020. The Properties are identified by San Francisco County's Assessor's Parcel Number(s) 1724-038, 1781-047 and 1781-048. The SVA applied to the Properties and any off-site area to which hazardous substances have or may have migrated from the Properties.

The 2550 Irving Street Site (Site) is approximately 0.44 acres in size and is bordered by 26th Avenue to the east and 27th Avenue to the west. TPCU owned the Site from 1987 to 2022. Per the conditions in the SVA, TPCU conducted a series of subsurface investigations to further delineate tetrachloroethene (PCE) contamination previously identified at the Site and to assess the risk posed by the contamination.

On February 1, 2021, DTSC entered into a California Land Reuse and Revitalization Act (CLRRA) agreement applying to 2550 Irving St. with Tenderloin Neighborhood Development Corporation (TNDC) a non-profit entity and prospective purchaser that planned to acquire the property to develop affordable housing. The CLRRA agreement provides TPCU with specified immunities from liability for certain response costs or damage claims under relevant California statutes. TNDC purchased the 2550 Irving St. Property from TPCU on June 15, 2022.

In response to DTSC’s recommendation and residents’ requests, TPCU conducted additional soil vapor and indoor air sampling at the six residential properties adjacent to the Site. The findings were documented in an AllWest Environmental, Inc. (AllWest) Report submitted by TPCU in September 2021. Subsequently, in February 2022, TPCU terminated the SVA. On June 15, 2022, TPCU sold the property to TNDC. In April and May 2023, TNDC demolished the former TPCU building in preparation for the planned affordable housing development. In response to DTSC’s recommendation and neighborhood requests for additional characterization of the location of the former dry cleaner, TNDC completed a characterization of the former Miracle Cleaners parcel (a portion of the Site) with membrane-interface probe (MIP), soil sampling, soil sample testing by laboratory and by field test kits that can detect liquid PCE, grab groundwater sampling, and other observations." on June 27, 2023. A MIP is a semi-quantitative, field-screening device uses heat to volatilize and mobilize contaminants to detect volatile organic compounds (VOCs) in soil and sediment. This technology is designed to help strengthen lines-of-evidence to evaluate for a potential PCE-source zone at the Site.

In response to the potential threat posed by offsite migration and soil vapor intrusion, DTSC used state funds in accordance with HSC Section 25355.5(c) to evaluate soil vapor intrusion.

This report was prepared by DTSC and presents the results of offsite sampling adjacent to the Site formerly occupied by TPCU. Offsite properties evaluated in the assessment include six residential properties located north of the Site on 26th and 27th Avenues.

Section 1.1 Purpose/Objectives

Investigations at the Site have identified chemical impacts to soil vapor which may be associated with historical Site activities or with an offsite source. Specifically, chlorinated volatile organic compounds (VOCs) were detected in soil vapor above DTSC's screening levels at the Site and in the vicinity of neighboring residences. The primary chemical of concern in soil vapor at the Site is PCE, which, if present in significant concentrations offsite, has the potential to migrate into indoor air spaces. Assessment of offsite soil vapor and indoor/outdoor air was proposed in the scope of work for Exhibit A as part of DTSC SRA funds Contract 21-T5020 (Contract), executed on February 7, 2022, which served as the work plan for this work.

The objectives of the Offsite Investigation were to further investigate offsite soil vapor concentrations, evaluate the potential for vapor intrusion into the residences north of the Site, and further evaluate residence-specific, empirical attenuation factors for potential use for risk management. Soil vapor and indoor air samples were collected and analyzed for VOCs to evaluate concentrations against DTSC human health screening levels.

Section 1.2 Report Structure

This Report has been organized into the following sections: introduction, site description and background, scope of the Offsite Investigation, analytical results and data evaluation, discussion of results, conclusions, and recommendations.

Section 2.0 Site Description and Background

The Site is irregularly shaped and totals approximately 0.44 acres. The Site is located in a mixed residential and commercial area in the Sunset District of San Francisco, California. The Site is bound by 26th Avenue to the east, 27th Avenue to the west, Irving Street to the south and residential homes to the north. Access to the property is from Irving Street and/or 27th Avenue. The Site was developed with a two-story office building (approximately 18,561 square feet) and parking lot. The building, now demolished, was occupied by TPCU, the property owner from 1987 to 2022.

Across Irving Street, there is another property referred to as the Former Albrite Cleaners, which operated as a dry-cleaning business. The Albrite property encompasses a 2,500 square foot area and is occupied by an approximately 1,500 square foot two-story building. Currently, the ground floor of the building is being used for storage by a glass business and the second floor is used as residential and is occupied. On October 29, 2021, DTSC issued an Imminent and Substantial Endangerment Determination and Order and Remedial Action Order to two responsible parties and/or liable parties as defined by HSC Section 25323.5. PCE was reportedly used at the Site between 1993 and 1994, at which point dry cleaning activities were moved off-Site to an unspecified location.

A Site vicinity map is presented as ***Figure 1***. A Site plan is included on ***Figure 2***. The residences north of the Site are two-story wood frame and stucco single family homes with slab-on-grade foundations, garages and storage areas on the ground floor, and living spaces on the ground and second floors.

Based on a review of the United States Geological Survey (USGS) Note 36, California Geomorphic Provinces map, the property is located in the Coast Ranges geomorphic province of California. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay (AllWest, 2019).

Soils encountered at the site consist of fine to coarse-grained, well-graded gravelly sand and sandy gravel fill material from beneath asphalt surface pavement/ground surface to approximately 1 to 2 feet below ground surface (bgs) (AllWest, 2020). From approximately 1 to 2 feet bgs to 15 feet bgs, soils are characterized as very fine to fine-grained poorly-graded sand. Soils encountered by AllWest during a subsurface investigation consisted of fine to coarse-grained, poorly to well-graded sand to the maximum explored depth of approximately 90 feet bgs. Additional subsurface details are provided in the AllWest's *Subsurface Investigation Report*, dated October 10, 2019.

According to the California's Groundwater Bulletin 118, the Site is located in the San Francisco Bay Hydrologic Region and lies in the Merced Valley Groundwater Basin (Basin No. 2-035). The Merced Valley Groundwater Basin is located on the western portion of the San Francisco Peninsula (Phillips, et al., 1993).

According to the California Regional Water Quality Control Board (CRWQCB), San Francisco Bay Region *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)*, Table 2-2, the Site lies in the Westside A Groundwater Basin (Basin ID Number 2-35A), which has designated existing and potential beneficial uses including municipal, process, industrial and agricultural.

In December 2019, Path Forward Partners, Inc. (Path Forward) conducted a soil vapor and groundwater investigation at the Site and groundwater was encountered in two soil borings at depths of 77.4 and 79.2 feet bgs (Path Forward, 2021).

Section 2.1 Site Background

The Site was undeveloped prior to the construction of two commercial structures on the middle of the property circa 1927 with occupants including a variety of stores/shops and a dry cleaner. Between the late 1920s and 1932, another building was constructed on the Site and utilized by an undertaker through at least the mid-1950s.

From at least 1940 to the mid-1960s, automotive service stations operated at the 26th (2500 Irving Street) and 27th Avenue (2550 Irving Street) corners of the Site. In 1965, the original, eastern portion of the existing building was constructed on the Site, occupied by a mortuary/funeral chapel. By 1966, the building increased in size to the current configuration and the customer parking lot was added. The mortuary operated at the Site (Parcel #1724-038) through the mid-1980s. TPCU took ownership of the Site in 1987.

In September and October 2021, soil vapor and indoor air sampling was conducted by AllWest on behalf of TPCU in six residences north of the Site. The investigation included screening for variations in indoor air quality using a HAPSITE® portable gas chromatograph-mass spectrometer (GC-MS). Indoor air samples were collected over a 24-hour period on the ground floor and second floor of the residences. In five of the six homes, PCE was detected at concentrations of <0.107 to 0.774 micrograms per cubic meter (µg/m^3). In the sixth home (1271 26th Avenue), PCE was detected at concentrations ranging from 1.25 to 29.2 µg/m^3. This investigation had several limitations that created high uncertainty with the collected data and prevented DTSC from considering these data as representative of potential vapor intrusion conditions. These limitations included failure to identify and remove household chemicals prior to sampling, and failure to restrict the opening of windows and doors to prevent ventilation and potential resulting dilution of the indoor air being sampled.

TPCU terminated the SVA with DTSC and ceased to conduct additional investigation of potential vapor intrusion at the six residences. In response to community concerns, DTSC requested Site Remediation Account (SRA) funds to conduct additional monitoring in six residential properties north of 2550 Irving Street. DTSC then issued the Contract to RMD Environmental Solutions, Inc. (RMD) to evaluate potential vapor intrusion at the six residences. DTSC ensured the above work plan deviations/limitations mentioned in the 2021 investigation were not repeated. DTSC's contractor, RMD, collected indoor air and soil vapor samples in March 2022 and February 2023 at the same six residences north of Site that AllWest previously sampled.

Section 3.0 Scope of the Offsite Investigation

The Offsite Investigation activities focused on the six residential properties, located north of the Site, and included the following actions:

- Community outreach, including coordination with residents, and procuring access agreements to conduct investigation activities on offsite properties.
- Survey and removal of selected household products that potentially contained chlorinated VOCs, to minimize confounding effects from consumer products, prior to indoor air testing. Closing/securing residence doors and windows,
- Indoor air testing of each residence, at several locations within each residence.
- Installation of one sub-slab soil vapor pin at 1271 26th Avenue located in the garage to assess the concentrations of PCE in the sub-slab (see ***Figure 2***).
- Soil vapor sampling events were conducted in March 2022 and February 2023 and included sampling of previously installed soil vapor probes SVP-28A/B through SVP-33A/B, a vapor pin at 1271 26th Avenue, indoor air at each residence, and outdoor ambient air samples. These activities are further detailed in the following sections. Sample locations are shown on ***Figure 2***.

The second round of sampling was originally scheduled for September 2022 during the dry season. However, due to requests from most of the residents and a representative of the Center for Public Environmental Oversight (CPEO), who was assisting the Mid Sunset Neighborhood Association (MSNA), DTSC delayed the sampling to early 2023. Sampling was ultimately conducted in February 2023.

Section 3.1 Soil Vapor Probe/Sub-Slab Vapor Pin Installation

The soil vapor probes sampled during the March 2022 and February 2023 events were constructed in 2020 by AllWest, on behalf of TPCU, in accordance with DTSC's *Advisory-Active Soil Gas Investigation* (Soil Gas Advisory) dated July 2015. AllWest installed the soil vapor probes at approximate depths of 5 feet bgs (shallow) and 15 feet bgs (deep) in each boring. Shallow soil vapor probes were labeled with an "A" and deep soil vapor probes were labeled with a "B" in the sample nomenclature. Installation details are discussed in AllWest's *Soil Vapor Investigation Report*, dated November 17, 2020. Soil vapor probe construction diagrams are included in ***Appendix A***.

A sub-slab soil vapor pin was installed in the garage at 1271 26th Avenue. Due to the presence of a relatively thin ground-floor slab (slab is about 2 inches thick), the sub-slab vapor point could not be installed with the intake below the foundation slab without protruding above the floor surface, presenting a tripping hazard within the residence. Therefore, on February 2, 2023, a temporary Cox-Colvin Vapor Pin™ was installed, sampled, and removed within the same day. The sub-slab vapor point was installed using a hand-held rotary-hammer drill to core a 5/8-inch diameter hole through the entire thickness of the concrete slab using the drill guide, exposing the underlying fill material. A silicone sleeve was placed around the stainless-steel Vapor Pin™ to form a seal against the concrete slab before the Vapor Pin™ was tapped into place (with its intake below the concrete surface) using a dead blow hammer. The Vapor Pin™ was removed after sampling and the hole was filled with concrete to match the existing surface.

Section 3.2 Soil Vapor and Indoor/Outdoor Air Collection and Laboratory Analysis

The soil vapor sampling was conducted in accordance with the DTSC *Advisory-Active Soil Gas Investigations*. The sub-slab vapor point was allowed to equilibrate for a period of at least 2 hours prior to sampling. Copies of the field sampling logs are included in ***Appendix B***. The sampling locations are shown in ***Figure 2***.

Section 3.2.1 Indoor/Outdoor Air Sample Collection

Prior to initiating sampling activities, a building survey was conducted in each residence on both the ground and upper floors. The purpose of the building surveys was to document building characteristics, determine sample locations, and assess the presence of household products that have the potential to interfere with the indoor air quality evaluation. Building surveys included screening for total organic vapors (TOV) using a parts-per-billion (ppb) range photo-ionization detector (PID). Field staff assessed residences for the presence of potential interfering household products, such as stain removers, glues, degreasers, cleaning solutions, and paints. Residents were asked to remove any household products identified during the building survey as possibly interfering with the sampling. Field forms for the building surveys and chemicals and materials identified during the March 2022 and February 2023 are included in ***Appendix C***. Building surveys also evaluated the presence of potential preferential pathways where subsurface vapors may intrude into the indoor air space. Preferential pathways can include openings in the building foundation, such as utility conduits associated with bathroom or kitchen water and sewer connections. Preferential pathways were screened with the PID. Locations of potential subsurface vapor intrusion pathways were considered when selecting indoor air sampling locations.

During the March 3 and 4, 2022 sampling event, a total of 15 indoor air samples (including one duplicate) and two outdoor ambient air samples were collected. During the February 1 and 2, 2023 sampling event, a total of 17 indoor air samples (including one duplicate sample) and three outdoor ambient air samples were collected. Samples were collected in laboratory-prepared, batch-certified, 6-liter Summa™ canisters with lab-calibrated flow controllers, particulate filters, and vacuum gauges. Flow rates of approximately 3.5 milliliters per minute (mL/min) were used to fill the canisters over an approximate 24-hour period. The pertinent field observations, initial and final pressure readings, and times were recorded on a field sampling form. A sketch was used to document each sample location. The outdoor ambient air samples were collected in the backyards of the residences at 1271 26th Avenue, 1284 27th Avenue, and 1276 27th Avenue.

Procedures followed for the collection of indoor and outdoor ambient air samples were:

- The Summa™ canister was placed at the sampling location.
- The flow controller and vacuum gauge were secured to the Summa™ canister by a quick-connect valve.
- Once the canister was opened, the initial vacuum was documented on an air sampling field form.
- If the initial vacuum was above -25 inches of mercury (in. Hg), the canister(s) was replaced to ensure that a proper sample volume was collected.
- Approximately one hour prior to the completion of the approximate 24-hour sampling interval, the vacuum of the canisters was observed. If the canister vacuum was greater than -5 in. Hg, the canister was closed by removing the quick connect flow controller. If the vacuum was less than -5 in. Hg, the canister was left open until an approximate vacuum of -5 in. Hg was reached.
- Sample times and vacuums were documented on the air sampling field forms.
- Sample canister labels were completed with a unique sample identification number (e.g., IAQ-1275-1), date and time of sample collection, initial and final vacuum, canister serial number, and analytical method.
- Sample canisters were submitted to the analytical laboratory under standard chain-of-custody (COC) protocols.

Residents were allowed to occupy their residences during sampling and were requested to operate heating, ventilation, and air conditioning (HVAC) systems normally for the season and day. Building HVAC settings were noted in the building survey forms. A chain-of-custody (COC) seal was placed across windows and exterior doors (except a minimum of two egress doors per California Fire Code) to provide evidence that they were not opened during the sampling period to minimize indoor air dilution. Fire egress doors were not custody-sealed, but they were kept closed as much as possible during the sampling period.

During the retrieval of indoor air samples on February 2, 2023, it was determined that the canister from the upper floor of 1284 27th Avenue did not collect the required volume of air sample. During overnight shipping to the laboratory on February 3, 2023, three canisters from 1275 26th Avenue were compromised. Consequently, these residences were resampled on February 16 and 17, 2023. Two indoor air samples were collected at the residence at 1284 27th Avenue, three indoor air samples were collected at the residence at 1275 26th Avenue, and one outdoor ambient air sample was collected in the backyard of the residence at 1284 27th Avenue. Prior to deploying the canisters, a PID was used to screen the residences for localized sources of VOCs. The indoor air sampling was performed using the same methods as the primary sampling event described above.

Section 3.2.2 Soil Vapor Collection

On March 2, 3 and 4, 2022, 15 soil vapor samples (including two duplicate samples) were collected from the exterior dual-nested soil vapor probes. On February 1 and 2, 2023, 14 soil vapor samples (including two duplicate samples) were collected from the exterior dual-nested soil vapor probes. During the March 2022 and February 2023 sampling events, one sub-slab vapor sample was collected from the resident garage at 1271 26th Avenue. During the February 2023 soil vapor sampling event, soil vapor probe SVP-31B was not sampled due to the presence of water in the tubing from wet soil conditions. Soil vapor samples were collected using batch-certified 1-liter Summa™ canisters and flow regulators with Teflon® tubing. Shut-in and leak tests were conducted, and three purge volumes were removed at flow rates of 100 to 200 mL/min using a Summa™ canister or hand-held purge pump. Helium was used as the leak check compound. Soil vapor sampling did not occur within five days of a significant rain event. (A significant rain event is defined as 0.5-inch or greater of rainfall during a 24-hour period.)

Section 3.2.3 Laboratory Analyses

Following sample collection, the samples were transported under COC to Pace Analytical (Pace), a California Environmental Laboratory Accreditation Program (ELAP) certified laboratory, for analysis. Soil vapor samples were analyzed for:

- VOCs using United States Environmental Protection Agency (USEPA) Method TO-15
- Helium using American Society for Testing and Materials (ASTM) Method D-1946

Indoor and outdoor ambient air samples were analyzed for:

- VOCs using USEPA Method TO-15 with Selective Ion Monitoring (SIM)

Indoor air and outdoor ambient air analytical results are included in ***Table 1***. Soil vapor laboratory analytical results are presented in ***Table 2***. Complete summaries of all detected analytes are provided in ***Appendix D***.

Section 4.0 Analytical Results and Data Interpretation

The results of the sampling conducted at each of the offsite properties for both events are summarized in the following sections. Full analytical reports from Pace laboratory are included in ***Appendix D***. Chemical concentrations over time for PCE in the 5 and 15 feet bgs samples are presented in ***Figures 3 and 4***. Analytical results are presented in ***Tables 1* through *3*** and locations of the vapor pin and indoor air samples are shown in ***Figures 5.1* through 5.*6***.

DTSC's default residential subslab/soil vapor screening level for PCE is 15 µg/m^3. For residential indoor air, DTSC's PCE screening level is 0.46 µg/m^3. Screening levels are explained in Section 5.0.

Section 4.1 Residence: 1271 26th Avenue

The soil vapor probes at 1271 26th Avenue were installed at approximately 5 feet bgs (SVP-31A) and 15 feet bgs (SVP-31B). In March 2022, PCE was detected in soil vapor at concentrations of 80.8 µg/m^3 at 5 feet bgs and 186 µg/m^3 at 15 feet bgs. PCE was detected at a concentration of 69.3 µg/m^3 from the sub-slab vapor pin (VP-1271-1) installed in the garage in March 2022. Additional detections of VOCs were reported in the soil vapor samples and are presented in the analytical laboratory reports in ***Appendix D***.

In February 2023, PCE was detected in soil vapor at a concentration of 91.7 µg/m^3 at 5 feet bgs. During the purging of the 15-foot soil vapor probe, moisture was encountered and a sample could not be collected. PCE was detected at a concentration of 55.6 µg/m^3 from the sub-slab vapor pin (VP-1271-1) installed in the garage of the residence. Additional VOCs were detected in the sub-slab soil vapor pin sample and the results are presented in the analytical laboratory reports (***Appendix D***).

Indoor air samples were collected at 1271 26th Avenue on the ground and upper floor of the residence. Ground floor samples were collected in the kitchen and garage, and an upper floor sample was collected in the living room. In March 2022, PCE was detected at concentrations of 0.166 µg/m^3 in the garage (IAQ-1271-1-DUP), 0.221 µg/m^3 in the kitchen (IAQ-1271-2), and 0.180 µg/m^3 in the upstairs living room (IAQ-1271-3). In February 2023, PCE was detected at concentrations of 0.156 µg/m^3 in the primary sample (IAQ-1271-1) and 0.237 µg/m^3 in the field duplicate sample (IAQ-1271-1-DUP) from the garage, 0.264 µg/m^3 in the kitchen (IAQ-1271-2), and 0.151 µg/m^3 in the upstairs living room (IAQ-1271-3). Additional detections of VOCs were reported in the indoor air samples and are presented in the analytical laboratory report.

Outdoor ambient air samples (OAA-4) were collected at 1271 26th Avenue in the backyard during both the March 2022 and February 2023 events. PCE was not detected in the outdoor ambient air samples. Additional VOCs were detected in the outdoor ambient air samples and the results are presented in the analytical laboratory reports (***Appendix D***).

Section 4.2 Residence: 1275 26th Avenue

The soil vapor probes at 1275 26th Avenue were installed at approximately 5 feet bgs (SVP-32A) and 15 feet bgs (SVP-32B). In March 2022, PCE was detected in soil vapor at concentrations of

74 µg/m^3 at 5 feet bgs and 187 µg/m^3 at 15 feet bgs. In February 2023, PCE was detected in soil vapor at concentrations of 93 µg/m^3 at 5 feet bgs and 313 µg/m^3 at 15 feet bgs. Additional VOCs were detected in the soil vapor samples and the results are presented in the analytical laboratory reports (***Appendix D***).

Indoor air samples were collected at 1275 26th Avenue on the ground and upper floor of the residence. The ground floor samples were collected in the bathroom and game room and the upper floor samples were collected in the living and dining room. In March 2022, PCE was detected at concentrations of 2.01 µg/m^3 in the bathroom (IAQ-1275-1) and 1.190 µg/m^3 in the upstairs living and dining room (IAQ-1275-2). In February 2023, PCE was detected at concentrations of 0.215 µg/m^3 in the bathroom (IAQ-1275-1) and 0.225 µg/m^3 in the game room (IAQ-1275-3). Due to issues encountered during transportation to the laboratory, the upstairs living and dining room sample (IAQ-1275-2) was not analyzed. Additional VOCs were detected in the indoor air samples and the results are presented in the analytical laboratory reports (***Appendix D***).

The residence was resampled on February 16 and 17, 2023. Three indoor air samples were collected from the ground floor (the bathroom and game room) and upper floor (the living and dining room). PCE was detected at concentrations of 0.252 µg/m^3 in the game room (IAQ-1275-3), 0.276 µg/m^3 in the bathroom (IAQ-1275-1), and 1.11 µg/m^3 in the upstairs living and dining room (IAQ-1275-2). Additional VOCs were detected in the indoor air samples and the results are presented in the analytical laboratory report (***Appendix D***).

Section 4.3 Residence: 1281 26th Avenue

The soil vapor probes at 1281 26th Avenue were installed at approximately 5 feet bgs (SVP-33A) and 15 feet bgs (SVP-33B). In March 2022, PCE was detected in soil vapor at concentrations of 172 µg/m^3 in the primary sample at 5 feet bgs, 180 µg/m^3 in the field duplicate sample at 5 feet bgs, and 360 µg/m^3 at 15 feet bgs. In February 2023, PCE was detected in soil vapor at concentrations of 553 µg/m^3 in the primary sample from 5 feet bgs, 481 µg/m^3 in the field duplicate sample at 5 feet bgs (SVP-33A-DUP), and 193 µg/m^3 at 15 feet bgs. Additional VOCs were detected in the soil vapor samples and the results are presented in the analytical laboratory reports (***Appendix D***).

Indoor air samples were collected at 1281 26th Avenue on the ground and upper floors of the residence. A ground floor sample was collected in the living room and an upper floor sample was collected in the dining room. During the February 2023 event, an additional ground floor indoor air sample was collected in the bathroom. In March 2022, PCE was detected at concentrations of 1.23 µg/m^3 in the living room (IAQ-1281-1) and 0.324 µg/m^3 in the upstairs dining room (IAQ-1281-2). In February 2023, PCE was detected at concentrations of 0.957 µg/m^3 in the living room (IAQ-1281-1), 0.998 µg/m^3 in the bathroom (IAQ-1281-3), and 0.232 µg/m^3 in the upstairs dining room (IAQ-1281-2). Additional VOCs were detected in the indoor air samples and the results are presented in the analytical laboratory reports (***Appendix D***).

Section 4.4 Residence: 1276 27th Avenue

The soil vapor probes at 1276 27th Avenue were installed at approximately 5 feet bgs (SVP-28A) and 15 feet bgs (SVP-28B). In March 2022, PCE was detected in soil vapor at concentrations of 95.7 µg/m^3 at 5 feet bgs and 384 µg/m^3 at 15 feet bgs. In February 2023, PCE was detected in soil vapor at concentrations of 78.1 µg/m^3 at 5 feet bgs and 202 µg/m^3 at 15 feet bgs. Additional VOCs were detected in the soil vapor samples and the results are presented in the analytical laboratory reports (***Appendix D***).

Indoor air samples were collected at 1276 27th Avenue on the ground and upper floors of the residence. A ground floor sample was collected in the living, laundry, and storage room and an upper floor sample was collected in the living room. In March 2022, PCE was detected at concentrations of 1.910 µg/m^3 in the living, laundry, and storage room (IAQ-1276-1) and 0.164 µg/m^3 in the upstairs living room (IAQ-1276-2). In February 2023, PCE was detected at concentrations of 0.221 µg/m^3 in the living, laundry, and storage room (IAQ-1276-1) and 0.183 µg/m^3 in the upstairs living room (IAQ-1276-2). Additional VOCs were detected in the indoor air samples and the results are presented in the analytical laboratory reports (***Appendix D***).

In February 2023, an outdoor ambient air sample (OAA-6) was collected at 1276 27th Avenue in the backyard. PCE was not detected in the outdoor ambient air sample. Additional VOCs were detected in the outdoor ambient air sample and the results are presented in the analytical laboratory report (***Appendix D***).

Section 4.5 Residence: 1280 27th Avenue

The soil vapor probes at 1280 27th Avenue were installed at approximately 5 feet bgs (SVP-29A) and 15 feet bgs (SVP-29B). In March 2023, PCE was detected in soil vapor at concentrations of 115 µg/m^3 at 5 feet bgs and 57.7 µg/m^3 at 15 feet bgs. In February 2023, PCE was detected in soil vapor at concentrations of 88.3 µg/m^3 at 5 feet bgs and 212 µg/m^3 at 15 feet bgs. Additional VOCs were detected in the soil vapor samples and the results are presented in the analytical laboratory reports (***Appendix D***).

Indoor air samples were collected at 1280 27th Avenue on the ground and upper floors of the residence. A ground floor sample was collected in the front bedroom and an upper floor sample was collected in the living room. In March 2022, PCE was detected at concentrations of 0.406 µg/m^3 in the front bedroom (IAQ-1280-1) and 0.346 µg/m^3 in the upstairs living room (IAQ-1280-2). In February 2023, PCE was detected at concentrations of 0.54 µg/m^3 in the front bedroom (IAQ-1280-1) and 0.346 µg/m^3 in the upstairs living room (IAQ-1280-2). Additional VOCs were detected in the indoor air samples and the results are presented in the analytical laboratory reports (***Appendix D***).

Section 4.6 Residence: 1284 27th Avenue

The soil vapor probes at 1284 27th Avenue were installed at approximately 5 feet bgs (SVP-30A) and 15 feet bgs (SVP-30B). In March 2022, PCE was detected in soil vapor at concentrations of 90.3 µg/m^3 in the primary sample at 5 feet bgs, 131 µg/m^3 in the field duplicate sample from 5 feet bgs, and 202 µg/m^3 at 15 feet bgs. In February 2023, PCE was detected in soil vapor at concentrations of 88.3 µg/m^3 in the primary sample at 5 feet bgs, 96.4 µg/m^3 in the field duplicate from 5 feet bgs, and 308 µg/m^3 at 15 feet bgs. Additional detections of VOCs were reported in the soil vapor samples and are presented in the analytical laboratory reports (***Appendix D***).

Indoor air samples were collected at 1284 27th Avenue on the ground and upper floor of the residence. A ground floor sample was collected in the kitchen and an upper floor sample was collected in the living room. An additional ground floor sample was collected in the garage during the February 2023 event. Due to issues with the laboratory provided Summa™ canister/flow regulator, a sample could not be collected in the upstairs living room (IAQ-1284-2) during the February 2023 event. In March 2022, PCE was detected at concentrations of 0.978 µg/m^3 in the kitchen (IAQ-1284-1) and 0.520 µg/m^3 in the upstairs living room (IAQ-1284-2). In February 2023, PCE was detected at concentrations of 0.422 µg/m^3 in the garage (IAQ-1284-3) and 0.553 µg/m^3 in the kitchen (IAQ-1284-1). Additional VOCs were detected in the indoor air samples and the results are presented in the analytical laboratory reports (***Appendix D***).

The residence was resampled on February 16 and 17, 2023. Indoor air samples were collected from the ground floor (kitchen) and upper floor (living room). PCE was detected at concentrations of 0.774 µg/m^3 in the kitchen (IAQ-1284-1) and 0.439 µg/m^3 in the living room (IAQ-1284-2). Additional VOCs were reported in the indoor air samples and the results are presented in the analytical laboratory reports (***Appendix D***).

Outdoor ambient air samples (OAA-5) were collected at 1284 27th Avenue in the backyard during the initial sampling events and when indoor air samples were resampled. In March 2022, PCE was detected at a concentration of 0.519 µg/m^3 but was not detected during both February 2023 events. Additional VOCs were detected in the outdoor ambient air samples and the results are presented in the analytical laboratory reports (***Appendix D***).

Section 4.7 Helium Results

During the March 2022 sampling event, the leak check compound helium was detected in 13 of the 15 soil vapor samples at concentrations up to 0.628 percent (%). For all soil vapor samples collected during the March 2022 sampling event, the detected helium leak ratio was within the acceptable limits (i.e., less than 5% of the concentration measured in the shroud during the leak check test [DTSC, 2015]). Based on these results, the soil vapor results are considered representative.

The leak check compound helium was detected in 11 of the 14 soil vapor samples at concentrations up to 1.34% during the February 2023 sampling event. For all soil vapor samples (except SVP-28B) collected in February 2023, the detected helium leak ratio was within the acceptable limits (i.e., less than 5% of the concentration measured in the shroud during the leak check test). In the soil vapor sample collected from probe SVP-28B, the helium leak ratio was calculated to be 6.71%, which exceeds the 5% recommended limit (DTSC, 2015), which suggests that there may have been a leak in the sampling train connecting the probe to the Summa canister, which could have allowed the inclusion of outside air resulting in a low bias for the VOC sample results.

Helium detections and the calculated leak ratio for each soil vapor probe is provided in ***Table 3***.

Section 5.0 Discussion of Results

DTSC's Human and Ecological Risk Office (HERO) screening levels represent the concentrations at which DTSC further investigates potential risk to human health. Screening levels are calculated concentrations that use default, upper-bound assumptions of exposure and toxicity to provide confidence that adverse health effects are unlikely to be observed at that concentration. The presence of chemicals at concentrations greater than their respective screening levels does not necessarily indicate that adverse impacts are occurring or will occur but does suggest that further evaluation of potential human health risk may be warranted.

Screening levels used to evaluate the analytical results included the following:

- DTSC-modified residential screening levels (DTSC SLs) for ambient air listed in DTSC's HERO Human Health Risk Assessment (HHRA) Note 3, where available (DTSC, 2022b); or,
- If DTSC SLs are not available, USEPA residential regional screening levels (RSLs) for ambient air (USEPA, 2022).
- For evaluation of soil vapor data, DTSC SLs and RSLs for ambient air were then adjusted to soil vapor screening levels using a default attenuation factor for existing residential buildings, as listed in USEPA's *Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (attenuation factor of 0.03; USEPA, 2015).

The DTSC SL for PCE is 0.46 $\mu g/m^3$, which is based on one in one million lifetime cancer risk (1×10^{-6}). Using the procedures outlined by USEPA (2015), the residential soil vapor screening level for PCE was calculated to be 15 $\mu g/m^3$, using a 0.03 attenuation factor (DTSC, 2023).

Section 5.1 Soil Vapor

Soil vapor analytical results are discussed by geographical area below. PCE concentrations north of the Site for the soil vapor probes installed at depths of 5 feet bgs (shallow) and 15 feet bgs (deep) are presented in ***Figures 6 and 7*** to illustrate the typical lateral extent and distribution of these compounds in the soil vapor at deep and shallow depths, respectively. The data presented in Figures 6 and 7 provide soil vapor data collected in February 2023 from soil vapor wells adjacent to the six residences (***Table 2***). It should be noted that investigation south of Irving Street is ongoing and DTSC expects that our understanding of the concentrations around the former Albrite Cleaners site at 2511 Irving Street may change with additional investigation."

Soil vapor samples were collected in the front of six residential properties located north of the Site, three on 26th Avenue and three on 27th Avenue. PCE concentrations on 26th Avenue and 27th Avenue were observed to generally increase with depth. Soil vapor concentrations are more stable over time at the 5-foot horizon (the horizon which most informs evaluation of vapor intrusion to these slab-on grade residences) than at greater depth, as shown in ***Figures 4 and 5***. During the March 2022 and February 2023 sampling events, PCE concentrations reported in soil vapor at each of the six residences exceeded the DTSC SL of 15 $\mu g/m^3$.

Sub-slab soil vapor samples were collected during both sampling events at 1271 26th Avenue, located furthest north from the Site. PCE concentrations reported in the sub-slab soil vapor samples exceeded the DTSC SL (15 µg/m^3) during both sampling events.

Section 5.2 Indoor Air

Indoor air results are presented in ***Table 1*** for PCE. Indoor air samples were collected in the six residential properties north of the Site during sampling events conducted in March 2022 and February 2023. Data provided in ***Figures 3, 4, 6 and 7*** and ***Tables 1*** and ***4*** demonstrate attenuation of PCE concentrations between soil vapor at 15 and 5 feet bgs and the indoor air. During the March 2022 sampling event, PCE concentrations exceeded the indoor air DTSC SL (0.46 µg/m^3) in the ground floor samples collected from 1275 26th Avenue, 1281 26th Avenue, 1276 27th Avenue, and 1284 27th Avenue (***Table 1***). Additionally, PCE concentrations exceeded the indoor air DTSC SL in the upper floor samples collected at 1275 26th Avenue and 1284 27th Avenue in March 2022.

During the February 2023 sampling event, PCE concentrations exceeded the indoor air DTSC SL in the ground floor samples collected at 1281 26th Avenue, 1280 27th Avenue, and 1284 27th Avenue (***Table 1***). Additionally, PCE concentrations exceeded the indoor air DTSC SL in samples collected from the upper floor at 1275 26th Avenue and 1284 27th Avenue during the February 2023 sampling event.

The mean of the indoor air (upper and ground floors) PCE concentrations from March 2022 and February 2023 were screened against the indoor air DTSC SL for PCE. March 2022 and February 2023 are considered wet season events during which indoor air samples were collected with minimal passive ventilation in the homes so as to not underestimate potential vapor intrusion risk. The average concentrations of the wet season samples are a reasonable representation of exposure to assess a lifetime potential risk. The mean indoor air PCE concentrations are presented in ***Table 4***. Mean indoor air concentrations for the six residences ranged from 0.204 µg/m^3 to 1.147 µg/m^3. The mean of 1.147 µg/m^3 was from the residence with consistent elevated concentrations on the upper floor and one elevated concentration on the ground floor. Vapor intrusion more typically presents with elevated concentrations on the ground floor and declining concentrations on the upper floor(s). However, vapor intrusion cannot be ruled out at this location.

The mean PCE concentrations were used to estimate vapor intrusion risks (***Table 4***). Risk was assessed by dividing the mean indoor air concentrations of PCE by the DTSC residential screening level for the cancer endpoint (0.46 µg/m^3) and multiplying by 1×10^{-6}. Using the screening level that is based on default, upper-bound assumptions of exposure and toxicity, the maximum estimated inhalation risk was 2×10^{-6} which is at the low end of the risk management range of 1×10^{-6} to 1×10^{-4} cited in the National Contingency Plan (1990) and incorporated in Chapter 6.8 Section 25356.1.5(a)(1) of the California Health and Safety Code (DTSC, 2022a).

Section 5.3 Outdoor Ambient Air

Ambient air in California can contain numerous volatile chemicals. Detections of VOCs in ambient air generally will not influence soil vapor results, but they may contribute to concentrations measured in indoor air samples. Ambient air detections may indicate the presence of an external source unrelated to vapor intrusion (DTSC, 2011). For this Offsite Investigation the ambient air samples were collected north of the Site in the backyards of three residences. PCE was detected above DTSC's residential screening level in one ambient air sample in March 2022. PCE was also detected in ambient air samples collected at the residences during 2021 sampling at the Site.

Section 6.0 Conclusions

Residential indoor air samples were collected from the six residential properties located north of the Site during the March 2022 and February 2023 sampling events. Soil vapor and residential indoor air samples were collected to determine the nature and extent of PCE in soil vapor and through vapor intrusion, and to evaluate residence-specific, empirical attenuation factors. The properties evaluated in the assessment included six residential properties located to the north of the Site along 26th Avenue and 27th Avenue. Vapor probes were installed in front of each residential property. Air samples were collected inside each residence to further assess potential risks from vapor intrusion.

The assessment resulted in the following findings:

- Soil vapor concentrations of PCE exceeded the DTSC SL at the six residences during both sampling events. Soil vapor concentrations are observed to generally increase 2- to 4-fold with greater depth, based on the 5- and 15-foot samples. The PCE concentrations in soil vapor, particularly at the 5-foot-bgs horizon, may warrant additional monitoring.
- PCE was detected in all indoor air samples at concentrations ranging between 0.164 and 2.01 $\mu g/m^3$ during the March 2022 sampling event.
- PCE was detected in all indoor air samples at concentrations ranging from 0.151 to 1.11 $\mu g/m^3$ during the February 2023 sampling event.
- PCE concentrations in indoor air exceeded the DTSC SL of 0.46 $\mu g/m^3$ at 1275 26th Avenue, 1281 26th Avenue, 1276 27th Avenue, and 1284 27th Avenue during the March 2022 sampling event and at 1275 26th Avenue, 1281 26th Avenue, 1280 27th Avenue, and 1284 27th Avenue during the February 2023 sampling event.
- PCE was not detected in outdoor ambient air samples, except for the outdoor ambient air sample collected at 1284 27th Avenue (0.519 $\mu g/m^3$) during the March 2022 sampling event. PCE was detected in outdoor ambient air during sampling in 2021.

Several factors can influence indoor air sample results. Contaminant vapor may potentially intrude into a building via cracks in the building foundation and the associated sewer line. However, the same air contaminants may also be found in outdoor air and in consumer products stored and/or used indoors. This is why it is important to remove the influence of outdoor air and consumer products containing the contaminant (in this case PCE) prior to sampling, so that there is increased certainty that what is measured in the indoor air sample is from vapor intrusion. When the influence of outdoor air (i.e., ventilation) is minimized ahead of sampling, the results can be interpreted to be a high-end measurement of potential inhalation risk, given ventilation is often conducive to lowering indoor VOC concentrations. These high-end measurements resulted in the conservative, maximum estimated risk of $2x10^{-6}$ (***Table 4***). This risk is at the low-end of the risk management range, slightly greater than the point of departure that defines *de minimis* risk. The calculated risk is expected to be an overestimate of true life-time risks, due to the factors described above.

Section 7.0 Recommendations

The results of the indoor air and soil vapor sampling indicate that vapor intrusion may be occurring at the six residential properties adjacent to the Site (property formerly owned by TPCU). However, the magnitude of the concentrations and resulting risks are low (maximum estimated lifetime risk of $2x10^{-6}$). Out of an abundance of caution and in response to community concerns, DTSC recommends additional soil gas sampling at the existing wells on 26th and 27th Avenues during the dry season. Soil gas sampling should be conducted after the 2550 Irving Affordable Housing building is complete and soil gas concentrations equilibrate. In addition, DTSC recommends concurrent indoor air sampling at the two residences which showed the greatest variability in empirical attenuation factors (1275 26th Avenue and 1276 27th Avenue). DTSC will continue overseeing investigation and mitigation activities at 2550 Irving Street, the Former Albrite Cleaners site, 2513 Irving Street, and 1300 26th Avenue.

Section 8.0 References

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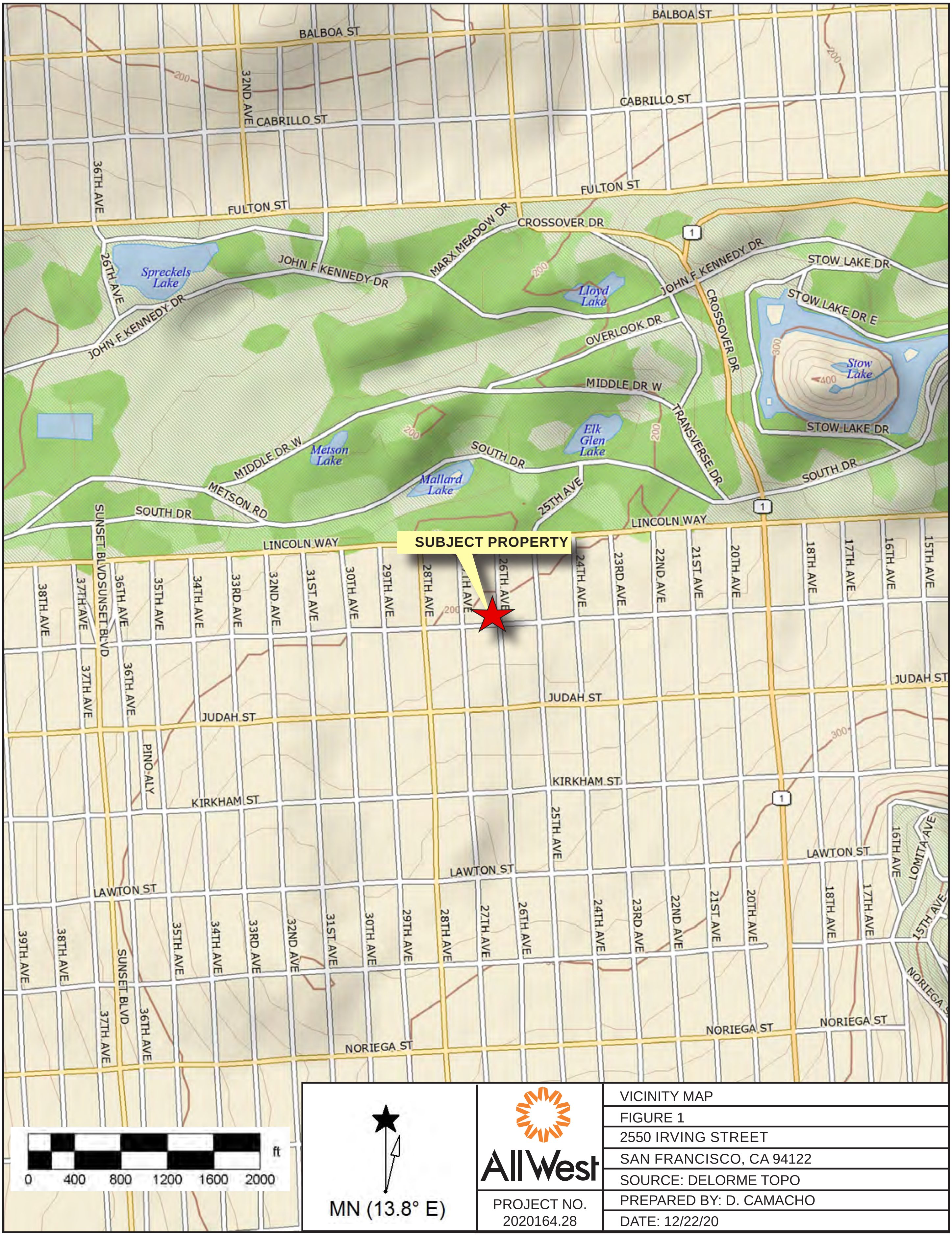
Figures

DELORME

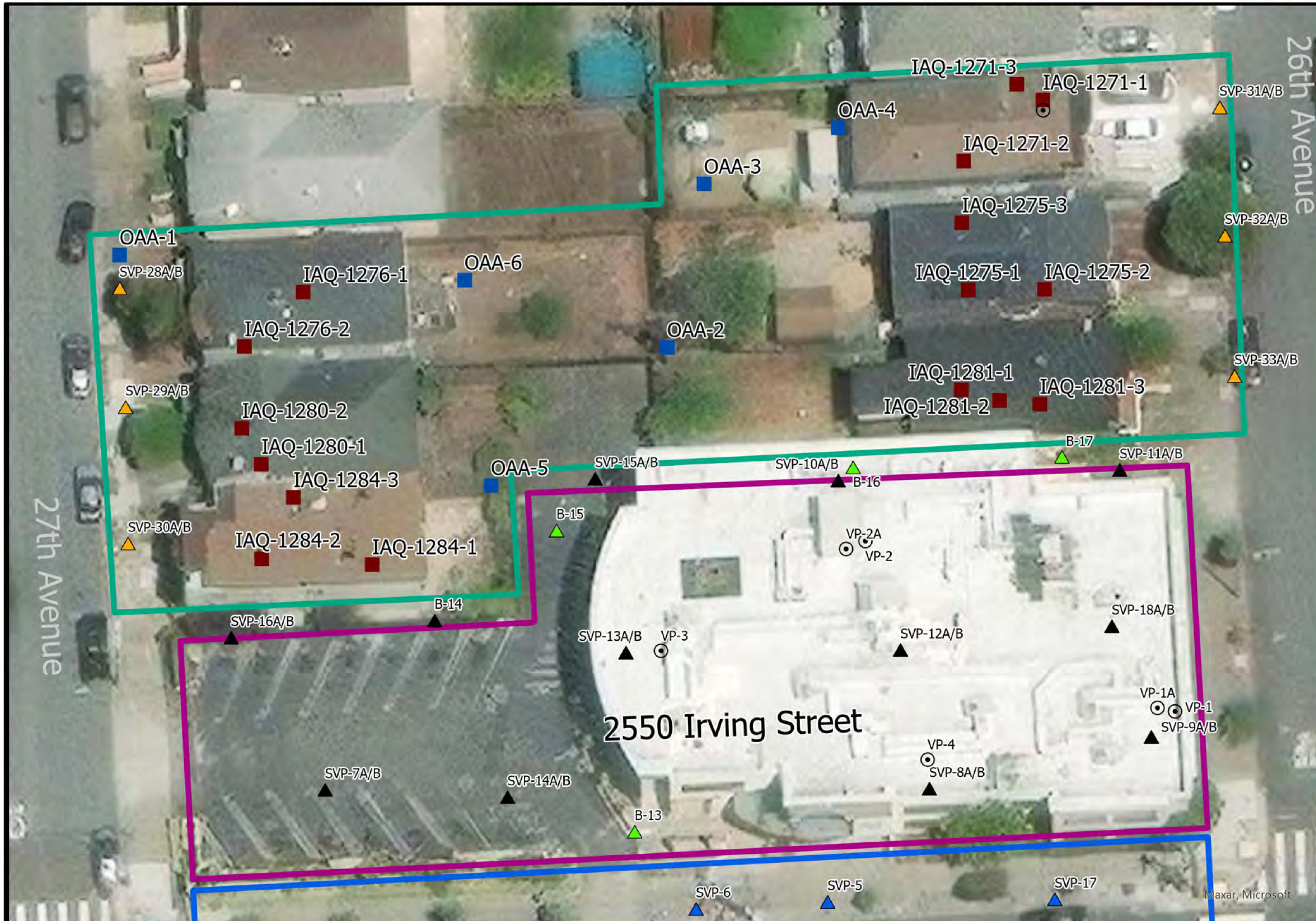
Topo USA® 8



AllWest

PROJECT NO. 2020164.28

VICINITY MAP
FIGURE 1
2550 IRVING STREET
SAN FRANCISCO, CA 94122
SOURCE: DELORME TOPO
PREPARED BY: D. CAMACHO
DATE: 12/22/20



LEGEND

Site Boundaries

2550 Irving Street (Former Miracle Cleaners)

The 2550 Irving Street Site (Off-Site Investigation)

Indoor Air Sample Locations

Indoor Air Quality Sample

Outdoor Air Quality Sample

Soil Vapor Sample

Sub-Slab Vapor Pin 2022/2023

Temporary Soil Vapor Probe (Path Forward, 12-14-12/15/19)

Sub-Slab Vapor Pin (AllWest, VP-1 and VP-2, 5/21/19, VP-1A, VP-2A, VP-3 and VP-4, 7/17/19)

Geoprobe Permanent Soil Vapor Probe Cluster to 5 & 15 Feet bgs (AllWest, 8/26-8/28/20)

Geoprobe Permanent Soil Vapor Cluster to 5 & 15 Feet bgs (AllWest, 5/23-5/24/20), Temporary Soil Vapor Probe to 5-Feet bgs (AllWest, 7/17/19)

Geoprobe Temporary Soil Vapor Probe to 15 Feet bgs (AllWest, 5/28/20)

Data Sources:
Locations from 2022 AllWest Report showing Proposed Indoor/Outdoor Air Sampling Locations

Department of Toxic Substances Control

Meredith Williams, Ph.D.
Director
700 Heinz Avenue
Berkeley, California 94710-2721

Yana Garcia
Secretary for Environmental Protection

Gavin Newsom
Governor

The 2550 Irving Street Site

Figure 2: Site Plan with Sample Locations
2550 Irving Street
San Francisco California
PROJECTS: 202402
Drawn By: AW Peer Review TM

0 15 30 60 90 120 Feet

N

Notes:
(1) All locations are approximate and do not reflect surveyed data
Spatial Reference
Name: WGS 1984 Web Mercator Auxiliary Sphere
PCS: WGS 1984 Web Mercator Auxiliary Sphere
GCS: GCS WGS 1984
Datum: WGS 1984
Projection: Mercator Auxiliary Sphere

Figure 3. PCE Trends in Soil Vapor, 5 Feet Below Ground Surface
The 2550 Irving Street Site
San Francisco, California

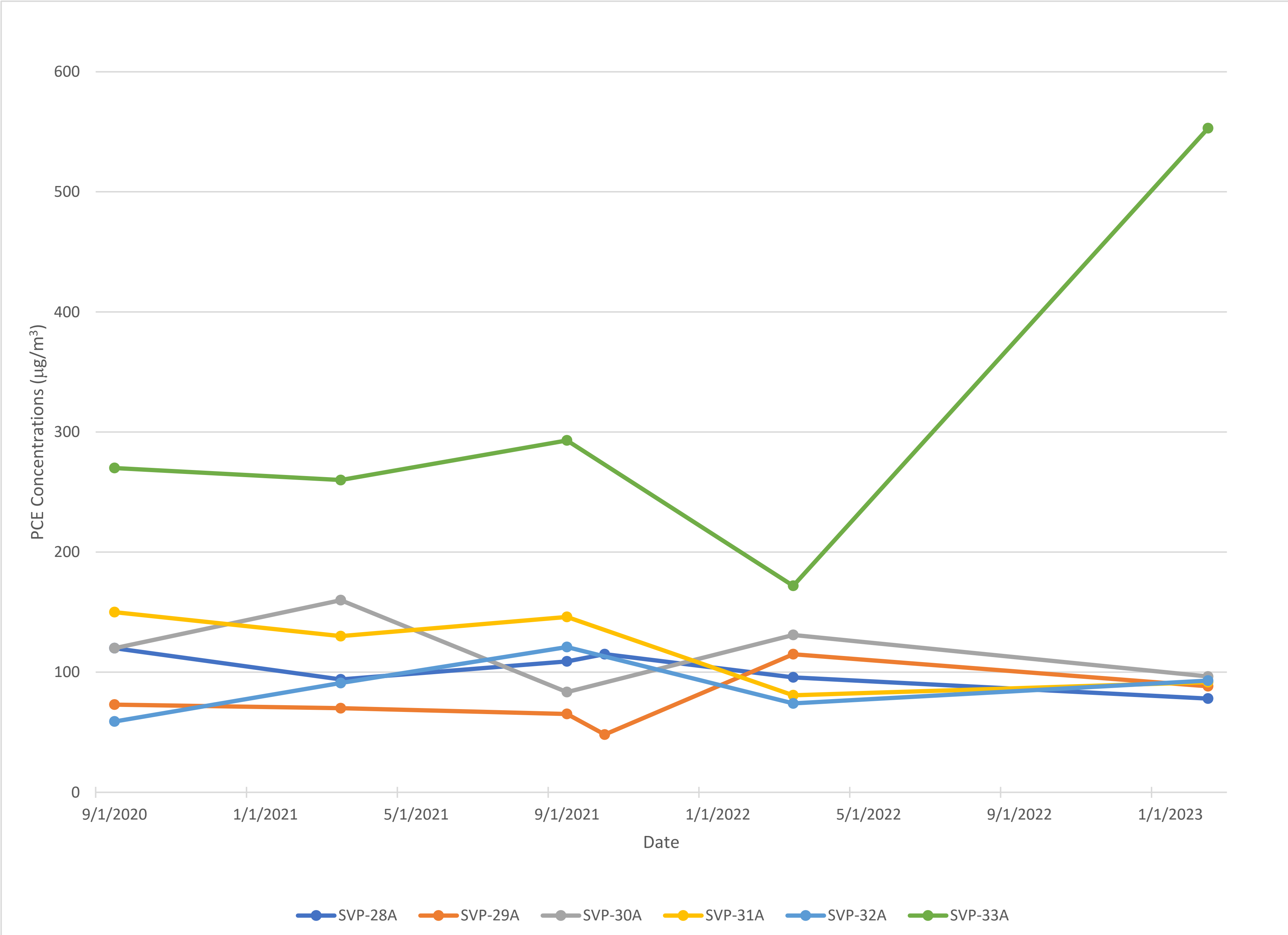
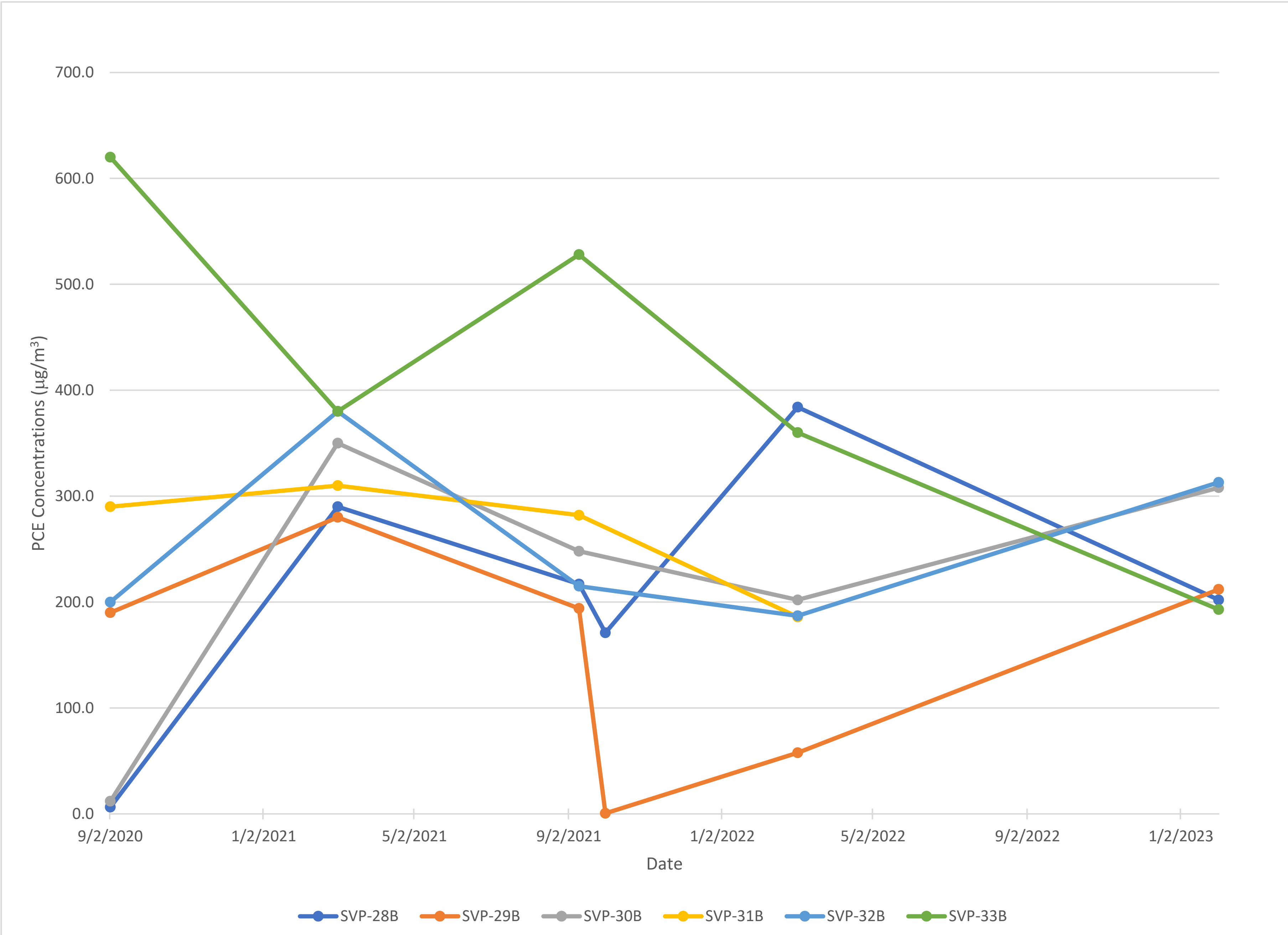


Figure 4. PCE Trends in Soil Vapor, 15 Feet Below Ground Surface
The 2550 Irving Street Site
San Francisco, California



OAA-4		
Date	Chem.	Conc.
3/4/22	PCE	<0.136
	TCE	<0.107
2/2/23	PCE	<0.136
	TCE	<0.107

IAQ-1271-2		
Date	Chem.	Conc.
3/4/22	PCE	0.221
	TCE	<0.107
2/2/23	PCE	0.264
	TCE	<0.107

VP-1271-1		
Date	Chem.	Conc.
3/4/2022	PCE	**69.3**
	TCE	1.15
2/2/2023	PCE	**55.6**
	TCE	<0.107

IAQ-1271-1		
Date	Chem.	Conc.
3/4/22	PCE	0.176 (0.166)
	TCE	<0.107
2/2/23	PCE	0.156 (0.237)
	TCE	<0.107

IAQ-1271-3		
Date	Chem.	Conc.
3/4/22	PCE	0.18
	TCE	<0.107
2/2/23	PCE	0.151
	TCE	<0.107

LEGEND

- Indoor Air Sample
- Vapor Pin Sample

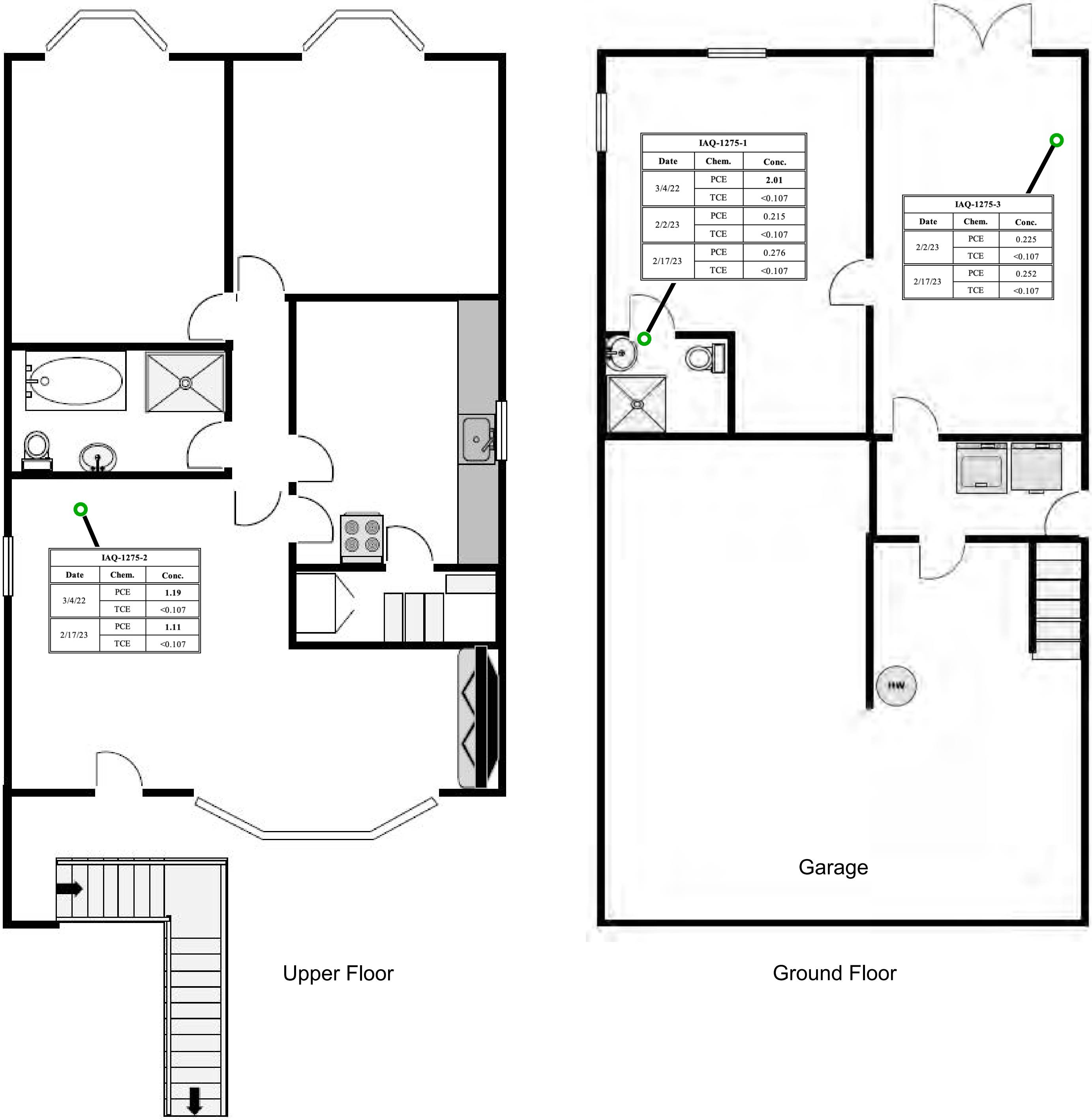
NOTES

1. Indoor air sampling locations are approximate.
2. Building dimensions and floor plan layouts are approximate.
3. All values are in units of micrograms per cubic meter (ug/m^3).
4. The residential air screening levels for tetrachloroethylene (PCE) and trichloroethylene (TCE) are 0.46 ug/m^3 and 0.48 ug/m^3, respectively.
5. All bold results indicate an exceedance of the screening level for PCE and TCE.
6. Chemical (Chem.) concentration (Conc.) that were non-detect are reported as "<" followed by the laboratory's reported detection limit.
7. Concentrations in parenthesis = Duplicates.

1271 26th Avenue
Indoor Air PCE/TCE Sampling Results
March 2022/February 2023
San Francisco, CA

Figure

5.1



IAQ-1275-1		
Date	**Chem.**	**Conc.**
3/4/22	PCE	**2.01**
	TCE	<0.107
2/2/23	PCE	0.215
	TCE	<0.107
2/17/23	PCE	0.276
	TCE	<0.107

IAQ-1275-3		
Date	**Chem.**	**Conc.**
2/2/23	PCE	0.225
	TCE	<0.107
2/17/23	PCE	0.252
	TCE	<0.107

IAQ-1275-2		
Date	**Chem.**	**Conc.**
3/4/22	PCE	**1.19**
	TCE	<0.107
2/17/23	PCE	**1.11**
	TCE	<0.107

LEGEND

Indoor Air Sample

NOTES

1. Indoor air sampling locations are approximate.
2. Building dimensions and floor plan layouts are approximate.
3. All values are in units of ug/m^3.
4. The residential air screening levels for tetrachloroethylene (PCE) and trichloroethylene (TCE) are 0.46 ug/m^3 and 0.48 ug/m^3, respectively.
5. All bold results indicate an exceedance of screening level for PCE and TCE.
6. Chemical (Chem.) concentration (Conc.) that were non-detect are reported as "<" followed by the laboratory's reported detection limit.

1275 26th Avenue
Indoor Air PCE/TCE Sampling Results
March 2022/February 2023
San Francisco, CA

Figure

5.2

IAQ-1281-1		
Date	Chem.	Conc.
3/4/22	PCE	**1.23**
	TCE	<0.107
2/2/23	PCE	**0.957**
	TCE	<0.107

IAQ-1281-2		
Date	Chem.	Conc.
3/4/22	PCE	0.324
	TCE	**5.47**
2/17/23	PCE	0.232
	TCE	<0.107

IAQ-1281-3		
Date	Chem.	Conc.
2/2/23	PCE	**0.998**
	TCE	<0.107

LEGEND

Indoor Air Sample

NOTES

1. Indoor air sampling locations are approximate.
2. Building dimensions and floor plan layouts are approximate.
3. All values are in units of micrograms per cubic meter (ug/m^3).
4. The residential air screening levels for tetrachloroethylene (PCE) and trichloroethylene (TCE) are 0.46 ug/m^3 and 0.48 ug/m^3, respectively.
5. All bold results indicate an exceedance of screening level for PCE and TCE.
6. Chemical (Chem.) concentration (Conc.) that were non-detect are reported as "<" followed by the laboratory's reported detection limit.

1281 26th Avenue
Indoor Air PCE/TCE Sampling Results
March 2022/February 2023
San Francisco, CA

Figure
5.3

OAA-6		
Date	Chem.	Conc.
2/2/2023	PCE	<0.136
	TCE	<0.107

IAQ-1276-1		
Date	Chem.	Conc.
3/4/2022	PCE	**1.91**
	TCE	<0.107
2/2/2023	PCE	0.221
	TCE	<0.107

IAQ-1276-2		
Date	Chem.	Conc.
3/4/2022	PCE	0.164
	TCE	<0.107
2/2/2023	PCE	0.183
	TCE	<0.107

LEGEND

Indoor Air Sample

NOTES

1. Indoor air sampling locations are approximate.
2. Building dimensions and floor plan layouts are approximate.
3. All values are in units of micrograms per cubic meter (ug/m^3).
4. the residential air screening levels for tetrachloroethylene (PCE) and trichloroethylene (TCE) are 0.46 ug/m^3 and 0.48 ug/m^3, respectively.
5. All bold results indicate an exceedance of the screening level for PCE and TCE.
6. Chemical (Chem.) concentration (Conc.) that were non-detect are reported as "<" followed by the laboratory's reported detection limit.

1276 27th Avenue
Indoor Air PCE/TCE Sampling Results
March 2022/February 2023 San Francisco, CA

Figure

5.4

IAQ-1280-2		
Date	Chem.	Conc.
3/4/2022	PCE	0.346
	TCE	<0.107
2/2/2023	PCE	0.346
	TCE	<0.107

IAQ-1280-1		
Date	Chem.	Conc.
3/4/2022	PCE	0.406
	TCE	<0.107
2/2/2023	PCE	**0.54**
	TCE	<0.107

LEGEND

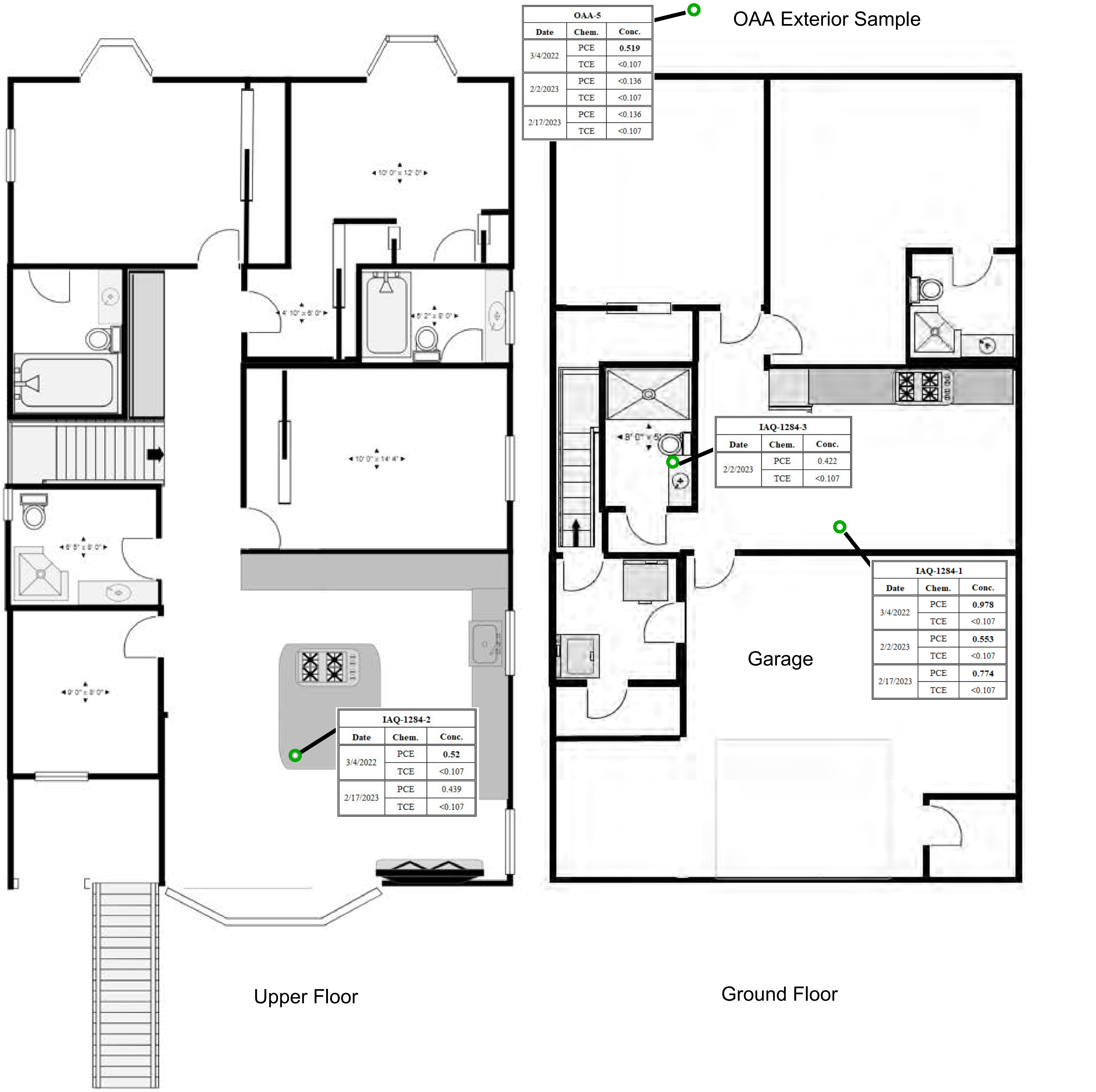
Indoor Air Sample

NOTES

1. Indoor air sampling locations are approximate.
2. Building dimensions and floor plan layouts are approximate.
3. All values are in unit of micrograms per cubic meter (ug/m^3).
4. The residential air screening levels for tetrachloroethylene (PCE) and trichloroethylene (TCE) are 0.46 ug/m^3 and 0.48 ug/m^3, respectively.
5. All bold results indicate an exceedance of the screening level for PCE and TCE.
6. Chemical (Chem.) concentration (Conc.) that were non-detect are reported as "<" followed by the laboratory's reported detection limit.

1280 27th Avenue
Indoor Air PCE/TCE Sampling Results
March 2022/February 2023
San Francisco, CA

Figure
5.5



OAA-5		
Date	Chem.	Conc.
3/4/2022	PCE	**0.519**
	TCE	<0.107
2/2/2023	PCE	<0.136
	TCE	<0.107
2/17/2023	PCE	<0.136
	TCE	<0.107

IAQ-1284-3		
Date	Chem.	Conc.
2/2/2023	PCE	0.422
	TCE	<0.107

IAQ-1284-1		
Date	Chem.	Conc.
3/4/2022	PCE	**0.978**
	TCE	<0.107
2/2/2023	PCE	**0.553**
	TCE	<0.107
2/17/2023	PCE	**0.774**
	TCE	<0.107

IAQ-1284-2		
Date	Chem.	Conc.
3/4/2022	PCE	**0.52**
	TCE	<0.107
2/17/2023	PCE	0.439
	TCE	<0.107

LEGEND

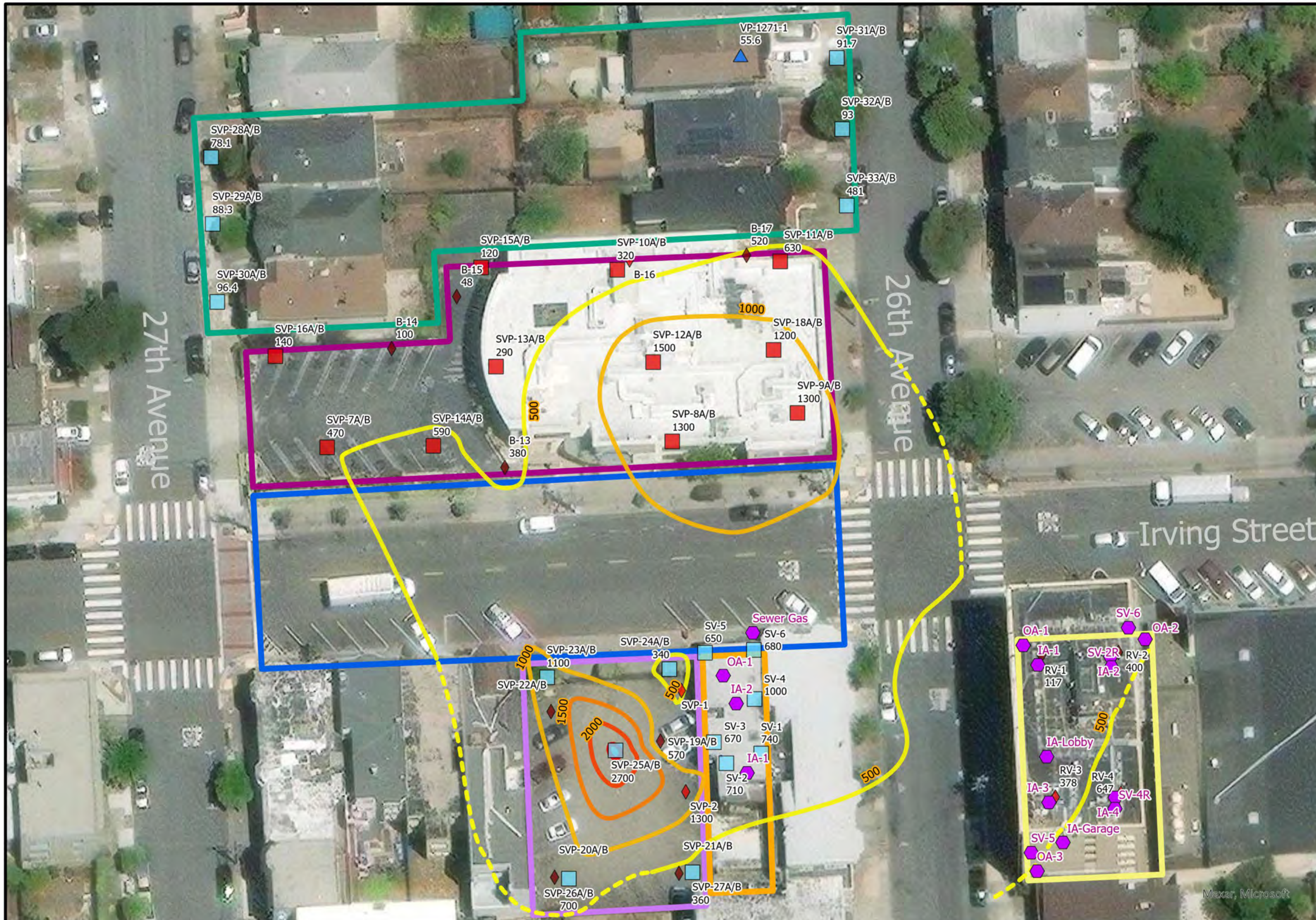
Indoor Air Sample

NOTES

1. Indoor air sampling locations are approximate.
2. Building dimensions and floor plan layouts are approximate.
3. All values are in units of micrograms per cubic meter (ug/m^3).
4. The residential air screening levels for tetrachloroethylene (PCE) and trichloroethylene (TCE) are 0.46 ug/m^3 and 0.48 ug/m^3, respectively.
5. All bold results indicate an exceedance of the screening level for PCE and TCE.
6. Chemical (Chem.) concentration (Conc.) that were non-detect are reported as "<" followed by the laboratory's reported detection limit.

1284 27th Avenue
Indoor Air PCE/TCE Sampling Results
March 2022/February 2023
San Francisco, CA

Figure
5.6



LEGEND

Soil Vapor Probes:

- Permanent Dual Nested Soil Vapor Probe Location
- Sub-Slab Vapor Pin Location (Note 4)
- Temporary Dual Nested Soil Vapor Probe Location
- Temporary Soil Vapor Probe Location
- Probe ID
- PCE Concentration (µg/m^3)
- Decommissioned Soil Vapor Probe Location
- Proposed Sample Points

Site Boundaries

- 1300 26th Avenue (Commercial/Residential Building)
- 2511 Irving Street (Former Albrite Cleaners)
- 2525 & 2525 Irving Street (Parking Lot Parcels)
- 2550 Irving Street (Former Miracle Cleaners)
- Irving Street Right of Way
- The Police Credit Union (Off-Site Investigation)

Shallow Soil Gas Concentration Contours (PCE)

- 500
- 500 - 1000
- 1000 - 1500
- 1500 - 2000
- 2000 - 2500
- Contour Inferred

Notes:
(1) All locations are approximate and do not reflect surveyed data
(2) Analytical results reported in micrograms per cubic meter (µg/m^3)
(3) Soil vapor data is not contemporaneous: it presents the most recent data at each permanent soil vapor probe location; and the most recent temporary probe data at each location > 15 feet from a permanent probe. Temporal inaccuracies are noted, in an effort to get best data resolution for potential spatial trends
(4) Sub-Slab Vapor Pin Results Are Provided for Information Only. Concentration contouring excludes this data
(5) PCE Screening Level in soil gas 15 µg/m3

Data Sources:
The Police Credit Union (Off-Site Investigations) data from RMD Environmental Solutions, Inc., March 2022
2525 Irving Street Data from Soil Vapor Investigation Report, AllWest Environmental, November 17, 2020
2550 Irving Street Proposed Affordable Housing Development data from Soil Vapor Investigation Report, AllWest Environmental, November 17, 2020 and Site Assessment and Report of Findings, Path Forward Environmental Engineer & Geology, dated February 2, 2021
1300 26th Avenue data from Draft Sub-Slab Vapor and Air Monitoring Report, Rosso Environmental, Inc., July 29, 2021
Irving Street Right-of-Way data from Soil Vapor Investigation Report, AllWest Environmental, November 17 2020

Acronyms:
PCE = Tetrachloroethylene
(µg/m^3) = Micrograms per cubic meter
FT BGS = Feet below ground surface

Yana Garcia
Secretary for Environmental Protection

Department of Toxic Substances Control

Meredith Williams, Ph.D.
Director
700 Heinz Avenue
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Gavin Newsom
Governor

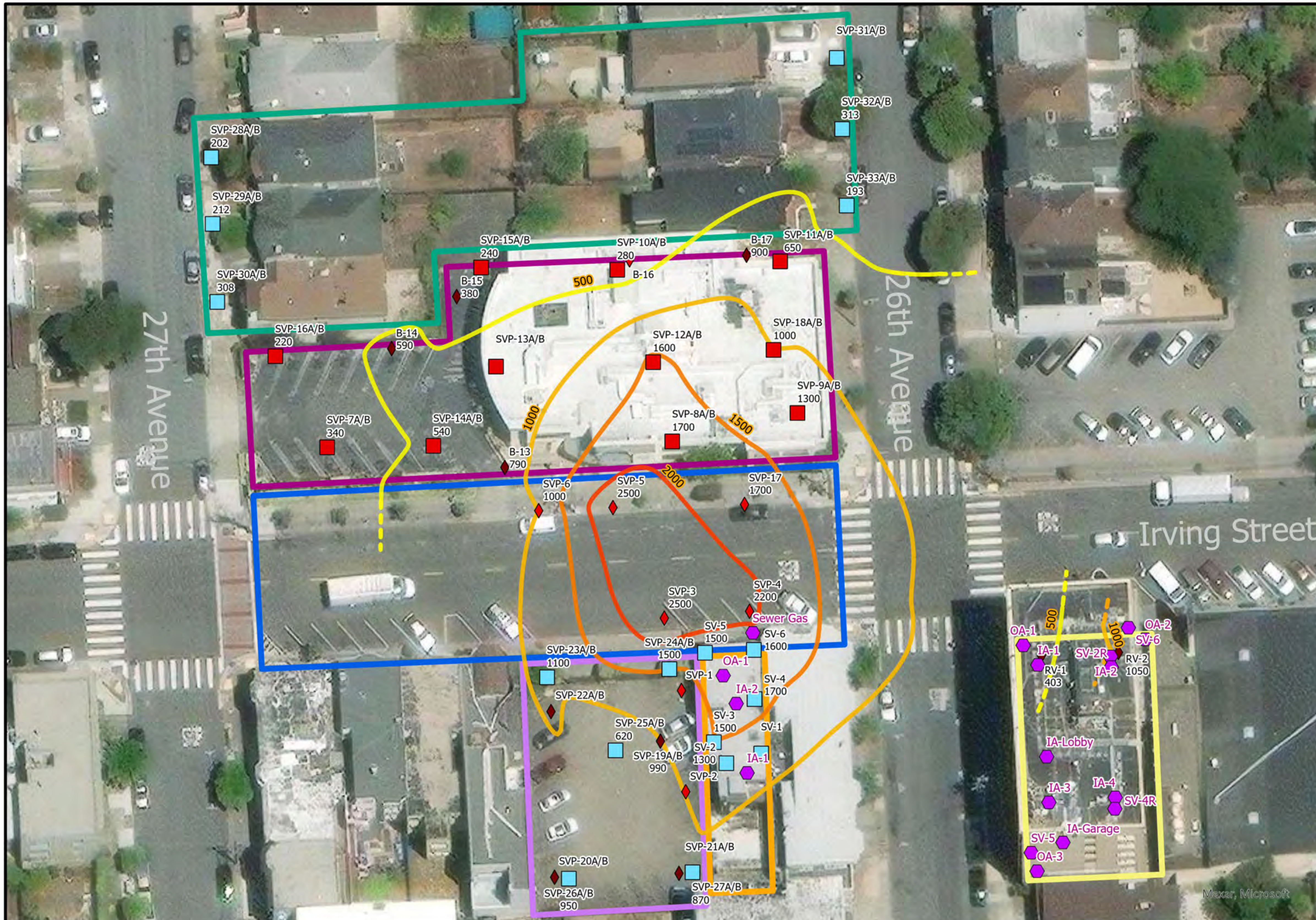
The 2550 Irving Street Site

Figure 6: Combined Shallower Soil Vapor Probe PCE Data
2550 Irving Street
San Francisco California
PROJECTS: 202402
Drawn By: AW   Peer Review TM

0 25 50 100 150 200 Feet

N

Spatial Reference
Name: WGS 1984 Web Mercator Auxiliary Sphere
PCS: WGS 1984 Web Mercator Auxiliary Sphere
GCS: GCS WGS 1984
Datum: WGS 1984
Projection: Mercator Auxiliary Sphere



LEGEND

Soil Vapor Probes:

- Permanent Dual Nested Soil Vapor Probe Location
- Temporary Dual Nested Soil Vapor Probe Location
- Temporary Soil Vapor Probe Location
- Probe ID
  PCE Concentration (µg/m^3)
- Decommissioned Soil Vapor Probe Location
- Proposed Sample Points

Site Boundaries

- 1300 26th Avenue (Commercial/Residential Building)
- 2511 Irving Street (Former Albrite Cleaners)
- 2525 & 2525 Irving Street (Parking Lot Parcels)
- 2550 Irving Street (Former Miracle Cleaners)
- Irving Street Right of Way
- The Police Credit Union (Off-Site Investigation)

Shallow Soil Gas Concentration Contours (PCE)

- 500
- 500 - 1000
- 1000 - 1500
- 1500 - 2000
- 2000 - 2500
- Contour Inferred

Notes:
(1) All locations are approximate and do not reflect surveyed data
(2) Analytical results reported in micrograms per cubic meter (µg/m^3)
(3) Soil vapor data is not contemporaneous: it presents the most recent data at each permanent soil vapor probe location; and the most recent temporary probe data at each location > 15 feet from a permanent probe. Temporal inaccuracies are noted, in an effort to get best data resolution for potential spatial trends
(4) PCE Screening Level in soil gas 15 µg/m3

Data Sources:
The Police Credit Union (Off-Site Investigations) data from RMD Environmental Solutions, Inc., March 2022
2525 Irving Street Data from Soil Vapor Investigation Report, AllWest Environmental, November 17, 2020
2550 Irving Street Proposed Affordable Housing Development data from Soil Vapor Investigation Report, AllWest Environmental, November 17, 2020 and Site Assessment and Report of Findings, Path Forward Environmental Engineer & Geology, dated February 2, 2021
1300 26th Avenue data from Draft Sub-Slab Vapor and Air Monitoring Report, Rosso Environmental, Inc., July 29, 2021
Irving Street Right-of-Way data from Soil Vapor Investigation Report, AllWest Environmental, November 17 2020

Acronyms:
PCE = Tetrachloroethylene
(µg/m^3) = Micrograms per cubic meter
FT BGS = Feet below ground surface

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Gavin Newsom
Governor

The 2550 Irving Street Site

Figure 7: Combined Deeper Soil Vapor Probe PCE Data

2550 Irving Street
San Francisco California
PROJECTS: 202402
Drawn By: AW Peer Review TM

0 25 50 100 150 200 Feet

N

Spatial Reference
Name: WGS 1984 Web Mercator Auxiliary Sphere
PCS: WGS 1984 Web Mercator Auxiliary Sphere
GCS: GCS WGS 1984
Datum: WGS 1984
Projection: Mercator Auxiliary Sphere

Tables

Table 1. SUMMARY OF INDOOR AIR AND OUTDOOR AMBIENT AIR ANALYTICAL RESULTS

The 2550 Irving Street Site

San Francisco, California

Sample ID	Date	Location	PCE	TCE	Comments
		Analyte:	PCE	TCE	
		Residential Air Screening Level:	0.46	0.48*	
Sample ID	Date	Location	μg/m³		Comments
1271 26th Avenue					
IAQ-1271-1	9/14/2021	Ground Floor - Garage	**29.2**	**164**	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		0.176	ND (<0.107)	
IAQ-1271-1-DUP	3/4/2022		0.166	ND (<0.107)	
IAQ-1271-1	2/2/2023		0.156	ND (<0.107)	
IAQ-1271-1-DUP			0.237	ND (<0.107)	
IAQ-1271-2	9/14/2021	Ground Floor - Kitchen	**3.08**	0.0718 J	Passive ventilation sample. Consumer products were not removed prior to sampling.
IAQ-1271-2 - DUP			**3.08**	ND (<0.107)	
IAQ-1271-2	3/4/2022		0.221	ND (<0.107)	
	2/2/2023		0.264	ND (<0.107)	
IAQ-1271-3	9/14/2021	Upper Floor - Living Room	**8.89**	ND (<1.07)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		0.18	ND (<0.107)	
	2/2/2023		0.151	ND (<0.107)	
OAA-4	3/4/2022	Backyard	ND (<0.136)	ND (<0.107)	
	2/2/2023		ND (<0.136)	ND (<0.107)	
IAQ-10	9/14/2021	Ground Floor - Living Room	**1.25**	0.0697 J	Passive ventilation sample. Consumer products were not removed prior to sampling.
IAQ-12	9/14/2021	Upper Floor - Main Bedroom	**4.1**	ND (<1.07)	Passive ventilation sample. Consumer products were not removed prior to sampling.
1275 26th Avenue					
IAQ-1275-1	9/9/2021	Ground Floor - Bathroom	0.119 J	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		**2.01**	ND (<0.107)	
	2/2/2023		0.215	ND (<0.107)	
	2/17/2023		0.276	ND (<0.107)	Resampled location
IAQ-1275-2	9/9/2021	Upper Floor - Living and Dining Room	**0.699**	0.0528 J	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		**1.19**	ND (<0.107)	
	2/2/2023[1]		NA	NA	
	2/17/2023		**1.11**	ND (<0.107)	Resampled location
IAQ-1275-3	9/9/2021	Ground Floor - Game Room	0.0937 J	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	2/2/2023		0.225	ND (<0.107)	
	2/17/2023		0.252	ND (<0.107)	Resampled location

Table 1. SUMMARY OF INDOOR AIR AND OUTDOOR AMBIENT AIR ANALYTICAL RESULTS

The 2550 Irving Street Site

San Francisco, California

Sample ID	Date	Location	PCE	TCE	Comments
		Analyte:	PCE	TCE	
		Residential Air Screening Level:	0.46	0.48*	
			µg/m³		
1281 26th Avenue					
IAQ-1281-1	9/7/2021	Ground Floor - Living Room	**0.774**	0.3	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		**1.23**	ND (<0.107)	
	2/2/2023		**0.957**	ND (<0.107)	
IAQ-1281-2	9/7/2021	Upper Floor - Dining Room	0.187	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		0.324	**5.47**	
	2/2/2023		0.232	ND (<0.107)	
IAQ-1281-3	2/2/2023	Ground Floor - Bathroom	**0.998**	ND (<0.107	
1276 27th Avenue					
IAQ-1276-1	9/30/2021	Ground Floor - Living, Laundry & Storage Room	0.156	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		**1.91**	ND (<0.107)	
	2/2/2023		0.221	ND (<0.107)	
IAQ-1276-2	9/30/2021	Upper Floor - Living Room	**0.513**	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		0.164	ND (<0.107)	
	2/2/2023		0.183	ND (<0.107)	
OAA-6	2/2/2023	Backyard	ND (<0.136)	ND (<0.107	
1280 27th Avenue					
IAQ-1280-1	9/30/2021	Ground Floor - Front Bedroom	**0.649 J4**	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		0.406	ND (<0.107)	
	2/2/2023		**0.54**	ND (<0.107)	
IAQ-1280-2	9/30/2021	Upper Floor - Living Room	0.216 J4	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		0.346	ND (<0.107)	
	2/2/2023		0.346	ND (<0.107)	
IAQ-16	9/30/2021	Ground Floor - Garage	0.279 J4	ND (<0.107)	

Table 1. SUMMARY OF INDOOR AIR AND OUTDOOR AMBIENT AIR ANALYTICAL RESULTS

The 2550 Irving Street Site

San Francisco, California

Sample ID	Date	Location	PCE	TCE	Comments
		Analyte:	PCE	TCE	
		Residential Air Screening Level:	0.46	0.48*	
			µg/m³		
1284 27th Avenue					
IAQ-1284-1	9/7/2021	Ground Floor - Kitchen	0.141	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		**0.978**	ND (<0.107)	
	2/2/2023		**0.553**	ND (<0.107)	
	2/17/2023		**0.774**	ND (<0.107)	Resampled location
IAQ-1284-2	9/7/2021	Upper Floor - Living Room	0.215	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	3/4/2022		**0.52**	ND (<0.107)	
	2/2/2023[2]		NS	NS	
	2/17/2023		0.439	ND (<0.107)	Resampled location
IAQ-1284-3	9/7/2021	Ground Floor - Garage	0.228	ND (<0.107)	Passive ventilation sample. Consumer products were not removed prior to sampling.
	2/2/2023		0.422	ND (<0.107)	
OAA-5	3/4/2022	Backyard	**0.519**	ND (<0.107)	
	2/2/2023		ND (<0.136)	ND (<0.107)	
	2/17/2023		ND (<0.136)	ND (<0.107)	Resampled location

Notes:

September 2021 analytical data was referenced from the Offsite Indoor Air Quailty and Soil Vapor Monitoring Report dated January 14, 2022.

Residential air screening levels taken from the following sources in order of preference:

- Department of Toxic Substances Control HERO Note 3 (June 2020 - Revised May 2022)
- United States Environmental Protection Agency Regional Screening Levels (November 2022)

[1] Canister missing during shipment - house was resampled.

[2] Canister did not achieve adequate vacuum pressure - house was resampled.

* EPA Regional Screening Level Value

Exceedances are **Bold** and highlight in yellow

DUP = duplicate

J = reported value is an estimate

J4 = the associated batch QC was outside the established quality control range for accuracy.

ID = identification

ND = not detected at or above reported detection limit (RDL)

PCE = tetrachloroethene

TCE = trichloroethene

µg/m³ = micrograms per cubic meter

Table 2. SUMMARY OF SOIL VAPOR AND SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
The 2550 Irving Street Site
San Francisco, California

Sample ID	Date	Depth (feet bgs)	PCE	TCE	Comments
		Analyte:	PCE	TCE	
		Residential SV SL (α = 0.03)	15	16*	
			μg/m^3		
1271 26th Avenue					
SVP-31A	3/2/2022	5	**80.8**	ND (<1.07)	
SVP-31A	2/1/2023	5	**91.7**	ND (<1.07)	
SVP-31B	3/2/2022	15	**186**	ND (<1.07)	
SVP-31B	2/1/2023	15	NS	NS	Not sample, due to moisture in tubing
VP-1271-1	3/4/2022	NA	**69.3**	1.15	Sub-slab vapor pin sample
VP-1271-1	2/1/2023	NA	**55.6**	ND (<1.07)	Sub-slab vapor pin sample
1275 26th Avenue					
SVP-32A	3/3/2022	5	**74**	ND (<1.07)	
SVP-32A	2/1/2023	5	**93**	ND (<1.07)	
SVP-32B	3/3/2022	15	**187**	ND (<1.07)	
SVP-32B	2/1/2023	15	**313**	ND (<1.07)	
1281 26th Avenue					
SVP-33A	3/3/2022	5	**172**	ND (<1.07)	
SVP-33A-DUP			**180**	ND (<1.07)	
SVP-33A	2/1/2023	5	**553**	ND (<1.07)	
SVP-33A-DUP			**481**	ND (<1.07)	
SVP-33B	3/3/2022	15	**360**	ND (<1.07)	
SVP-33B	2/1/2023	15	**193**	ND (<1.07)	
1276 27th Avenue					
SVP-28A	3/3/2022	5	**95.7**	3.73	
SVP-28A	2/2/2023	5	**78.1**	ND (<1.07)	
SVP-28B	3/3/2022	15	**384**	**43.7**	
SVP-28B	2/1/2023	15	**202**	ND (<1.07)	Helium results indicate a potential leak in the sampling train
1280 27th Avenue					
SVP-29A	3/4/2022	5	**115**	4.38	
SVP-29A	2/1/2023	5	**88.3**	ND (<1.07)	
SVP-29B	3/4/2022	15	**57.7**	ND (<1.07)	
SVP-29B	2/1/2023	15	**212**	ND (<1.07)	
1284 27th Avenue					
SVP-30A	3/4/2022	5	**90.3**	ND (<1.07)	
SVP-30A-DUP			**131**	2.74	
SVP-30A	2/2/2023	5	**88.3**	ND (<1.07)	
SVP-30A-DUP			**96.4**	ND (<1.07)	
SVP-30B	3/4/2022	15	**202**	ND (<1.07)	
SVP-30B	2/2/2023	15	**308**	ND (<1.07)	

Notes:
Residential air screening levels taken from the following sources in order of preference:
- Department of Toxic Substances Control (DTSC) HERO Note 3 (June 2020 - Revised May 2022)
- United States Environmental Protection Agency (USEPA) Regional Screening Levels (November 2022)

* USEPA Regional Screening Level value used to calculate screening level.
Exceedances are **Bold** and highlight in yellow
0.03 attenuation factor (AF) taken from USEPA, 2015.

α = attenuation factor
μg/m^3 = micrograms per cubic meter
bgs= below ground surface
DUP = duplicate
ID = identification
NA = not applicable
ND = not detected at or above reported detection limit (RDL)
NS = not sampled
PCE = tetrachloroethene
RSL = Regional Screening Levels
SV SL = Soil Vapor Screening Level
TCE = trichloroethene

Table 3. SUMMARY OF HELIUM ANALYTICAL RESULTS

The 2550 Irving Street Site

San Francisco, California

Sample ID	Date	Depth ft-bgs	Helium		
			Helium in Sample %	**Average Helium Under Shroud** %	**Leak Ratio[1]** %
VP-1271-1	03/04/22	0.5	ND<0.100	23.2	NC
VP-1271-1	02/02/23	0.5	0.357	22.7	1.57
SVP-28A	03/03/22	5	ND<0.100	20.4	NC
SVP-28A	02/02/23	5	ND<0.100	22.8	NC
SVP-28B	03/03/22	15	0.355	21.7	1.64
SVP-28B	02/02/23	15	1.34	20.0	6.71
SVP-29A	03/04/22	5	0.321	21.6	1.48
SVP-29A	02/01/23	5	0.307	25.7	1.20
SVP-29B	03/04/22	15	0.137	21.2	0.65
SVP-29B	02/02/23	15	0.232	22.8	1.02
SVP-30A	03/04/22	5	0.270	20.2	1.34
SVP-30A	02/02/23	5	0.302	22.5	1.34
SVP-30A-DUP	03/04/22	5	0.628	20.2	3.11
SVP-30A-DUP	02/02/23	5	0.336	22.5	1.50
SVP-30B	03/04/22	15	0.217	21.9	0.99
SVP-30B	02/02/23	15	0.205	20.4	1.01
SVP-31A	03/02/22	5	0.438	20.1	2.18
SVP-31A	02/01/23	5	ND<0.100	27.6	NC
SVP-31B	03/02/22	15	0.371	20.3	1.83
SVP-32A	03/03/22	5	0.275	19.8	1.39
SVP-32A	02/01/23	5	ND<0.100	25.4	NC
SVP-32B	03/03/22	15	0.369	20.3	1.82
SVP-32B	02/01/23	15	0.375	22.2	1.69
SVP-33A	03/03/22	5	0.168	19.8	0.85
SVP-33A	02/01/23	5	0.154	27.3	0.56
SVP-33A-DUP	03/03/22	5	0.462	19.8	2.33
SVP-33A-DUP	02/01/23	5	0.245	27.3	0.90
SVP-33B	03/03/22	15	0.447	22.6	1.98
SVP-33B	02/01/23	15	0.106	22.3	0.48

Notes:

Fixed gases analyzed by ASTM Method D-1946.

Cell highlighted in gray exceeds the 5% acceptable limit.

% = percent

DUP = duplicate

ft-bgs = feet below ground surface.

ID = identification

ND = not detected at or above reported detection limit (RDL)

NC = not calculated, helium not detected in sample.

[1] Estimated leak ratio (%) = [Concentration of Helium in Sample (%)] / [Concentration of Helium in Shroud (%)] X100.

Table 4. PCE CONCENTRATIONS IN INDOOR AIR AND ESTIMATED RISKS

The 2550 Irving Street Site

San Francisco, California

Address	PCE Concentration Range ($\mu g/m^3$)[a]	Mean PCE Concentration ($\mu g/m^3$)[b]	# Samples > SL[c]	PCE Residential Inhalation Risk[d]	Notes	Empirical AF, March 2022*	Empirical AF, February 2023*
1271 26th Avenue	0.151 - 0.264	0.204	0	4.E-07	Highest concentrations in September 2021. All samples screened out after removing consumer products.	0.003	0.005
1275 26th Avenue	0.276 - 2.010	1.147	3	2.E-06	Exceedances consistently on upper floor, including September 2021. Ground floor exceedance only in March 2022.	0.027	0.003
1281 26th Avenue	0.232 - 1.230	0.686	2	1.E-06	TCE Upstairs 5.47 $\mu g/m^3$ in March 2022. PCE results consistent with VI pathway.	0.007	0.002
1276 27th Avenue	0.164 - 1.910	0.620	1	1.E-06	PCE exceedances inconsistent by floor and are data outliers.	0.020	0.003
1280 27th Avenue	0.346 - 0.540	0.410	1	9.E-07	PCE results consistent with VI pathway.	0.004	0.006
1284 27th Avenue	0.439 - 0.978	0.678	3	1.E-06	PCE results consistent with VI pathway. March 2022 outdoor air sample exceeded residential SL.	0.011	0.009

Notes:

a Lowest and highest concentrations from the March 2022 and February 2023 indoor air results from (Sampling events conducted by DTSC and RMD.)

b Mean of 4 samples: upstairs and downstairs samples (2) and corresponding seasonal replicates (2)

c Of 4 seasonal pair samples

d Risk assessed by dividing mean concentration by HHRA Note 3 residential air screening level and multiplying by 10^{-6}. Reported to one significant figure.

$\mu g/m^3$ = micrograms per cubic meter

> = greater than

= number

PCE = tetrachloroethene

*Empirical attenuation factors (AFs) are calculated by dividing the highest ground floor indoor air concentration by the concurrent external 5 foot depth soil vapor. For 1271 26th Avenue, the subslab vapor concentration was used in lieu of soil vapor.

Appendix A

Vapor Probe Construction Design

WELL NUMBER SVP-28 A/B

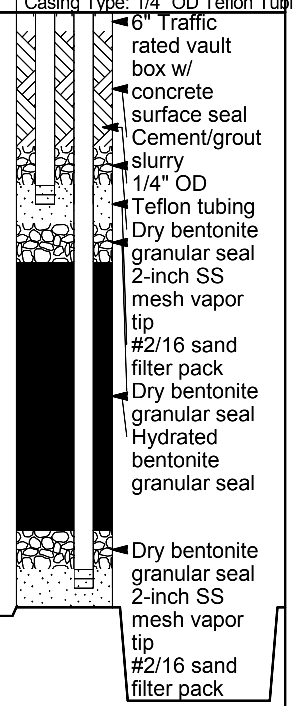
AllWest Environmental
2141 Mission Street, Suite 100
San Francisco, CA 94110
Telephone: 415-391-2510

CLIENT Police Credit Union
PROJECT NAME PCU Subsurface
PROJECT NUMBER 202099.23
PROJECT LOCATION 1276 27th Ave., San Francisco, CA
DATE STARTED 8/27/20 **COMPLETED** 8/27/20
GROUND ELEVATION **HOLE SIZE** 2" inches
DRILLING CONTRACTOR ECA (Environmental Control Associates, Inc.)
GROUND WATER LEVELS:
DRILLING METHOD DPT (direct push technology)
AT TIME OF DRILLING ---
LOGGED BY Sam Calloway **CHECKED BY** Len Niles
AT END OF DRILLING ---
NOTES 10" dia conc. core, 6" dia vault box. Set perm SVPs @ 5' and 15' bgs
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0			0.5	Concrete approximately 3" thick	
		SP	4.0	(SP) Tan to brown fine-grained sand, no odor or staining.	PID = 0
5		SP	8.0	(SP) Same as above.	PID = 0
10		SP	12.0	(SP) Same as above.	PID = 0
15		SP	15.5	(SP) Same as above.	PID = 0

Bottom of borehole at 15.5 feet.

WELL DIAGRAM



AllWest Environmental
2141 Mission Street, Suite 100
San Francisco, CA 94110
Telephone: 415-391-2510

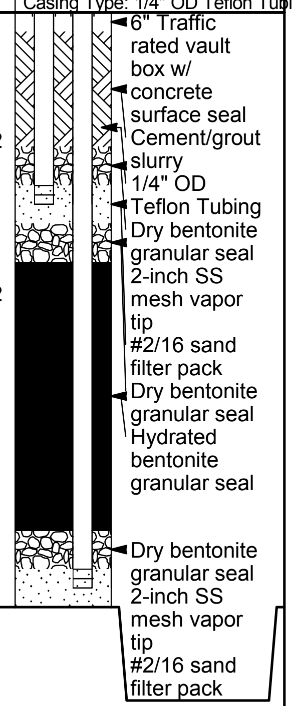
WELL NUMBER SVP-29 A/B

CLIENT Police Credit Union **PROJECT NAME** PCU Subsurface
PROJECT NUMBER 202099.23 **PROJECT LOCATION** 1280 27th Ave., San Francisco, CA
DATE STARTED 8/27/20 **COMPLETED** 8/27/20 **GROUND ELEVATION** **HOLE SIZE** 2" inches
DRILLING CONTRACTOR ECA (Environmental Control Associates, Inc.) **GROUND WATER LEVELS:**
DRILLING METHOD DPT (direct push technology) **AT TIME OF DRILLING** ---
LOGGED BY Sam Calloway **CHECKED BY** Len Niles **AT END OF DRILLING** ---
NOTES 10" dia conc. core, 6" dia vault box. Set perm SVPs @ 5' and 15' bgs **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0			0.3	Concrete approxiamtely 3" thick	
		SP	4.0	(SP) Brown fine-grained sand w/ v. minor gravel (apparent concrete debris) from 0.5-1' bgs, no odor or staining.	PID = 0.2
5		SP	8.0	(SP) Brown fine-grained sand, no odor or staining.	PID = 0.2
10		SP	12.0	(SP) Same as above.	PID = 0
15		SP	15.5	(SP) Same as above.	PID = 0

Bottom of borehole at 15.5 feet.

WELL DIAGRAM



WELL NUMBER SVP-30 A/B

AllWest
AllWest Environmental
2141 Mission Street, Suite 100
San Francisco, CA 94110
Telephone: 415-391-2510

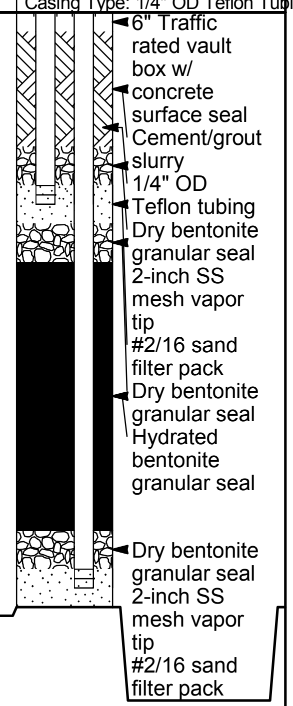
CLIENT Police Credit Union
PROJECT NAME PCU Subsurface
PROJECT NUMBER 202099.23
PROJECT LOCATION 1284 27th Ave., San Francisco, CA
DATE STARTED 8/27/20 **COMPLETED** 8/27/20
GROUND ELEVATION **HOLE SIZE** 2" inches
DRILLING CONTRACTOR ECA (Environmental Control Associates, Inc.)
GROUND WATER LEVELS:
DRILLING METHOD DPT (direct push technology)
AT TIME OF DRILLING ---
LOGGED BY Sam Calloway **CHECKED BY** Len Niles
AT END OF DRILLING ---
NOTES 10" dia conc. core, 6" dia vault box. Set perm SVPs @ 5' and 15' bgs
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0			0.5	Concrete approximately 3" thick	
		SP	4.0	(SP) Brown fine-grained sand w/ v. minor gravel (apparent concrete debris), no odor or staining.	PID = 0
5		SP	8.0	(SP) Brown fine-grained sand, no odor or staining.	
10		SP	12.0	(SP) Same as above.	PID = 0
15		SP	15.5	(SP) Same as above.	PID = 0 PID = 0

Bottom of borehole at 15.5 feet.

WELL DIAGRAM

Casing Type: 1/4" OD Teflon Tubir



AllWest Environmental
2141 Mission Street, Suite 100
San Francisco, CA 94110
Telephone: 415-391-2510

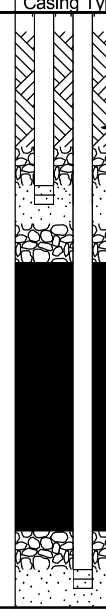
WELL NUMBER SVP-31 A/B

CLIENT Police Credit Union
PROJECT NAME PCU Subsurface
PROJECT NUMBER 202099.23
PROJECT LOCATION 1271 26th Ave., San Francisco, CA
DATE STARTED 8/26/20 **COMPLETED** 8/26/20
GROUND ELEVATION **HOLE SIZE** 2" inches
DRILLING CONTRACTOR ECA (Environmental Control Associates, Inc.)
GROUND WATER LEVELS:
DRILLING METHOD DPT (direct push technology)
AT TIME OF DRILLING ---
LOGGED BY Sam Calloway **CHECKED BY** Len Niles
AT END OF DRILLING ---
NOTES 10" dia conc. core, 6" dia vault box. Set perm SVPs @ 5' and 15' bgs
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0			0.5	Concrete appoximately 3" thick	
		SP	4.0	(SP) Brown fine-grained sand, no odor or staining.	PID = 0
5		SP	8.0	(SP) Same as above.	PID = 0
10		SP	12.0	(SP) Same as above.	PID = 0.1
15		SP	15.5	(SP) Same as above.	PID = 0

Bottom of borehole at 15.5 feet.

WELL DIAGRAM



GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 9/28/20 16:35 - K:\BENTLEY\PROJECTS\202099.23 PCU SVP-29-31.GPJ

AllWest Environmental
2141 Mission Street, Suite 100
San Francisco, CA 94110
Telephone: 415-391-2510

WELL NUMBER SVP-32 A/B

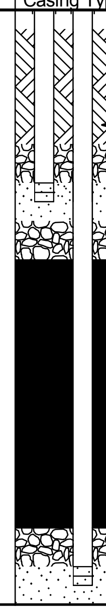
CLIENT Police Credit Union
PROJECT NAME PCU Subsurface
PROJECT NUMBER 202099.23
PROJECT LOCATION 1275 26th Ave., San Francisco, CA
DATE STARTED 8/26/20 **COMPLETED** 8/26/20
GROUND ELEVATION **HOLE SIZE** 2" inches
DRILLING CONTRACTOR ECA (Environmental Control Associates, Inc.)
GROUND WATER LEVELS:
DRILLING METHOD DPT (direct push technology)
AT TIME OF DRILLING ---
LOGGED BY Sam Calloway **CHECKED BY** Len Niles
AT END OF DRILLING ---
NOTES 10" dia conc. core, 6" dia vault box. Set perm SVPs @ 5' and 15' bgs
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0			0.3	Concrete approxiamtely 3" thick	
		SP	4.0	(SP) Brown fine-grained sand, no odor or staining.	PID = 0
5		SP	8.0	(SP) Same as above.	PID = 0
10		SP	12.0	(SP) Same as above.	PID = 0
15		SP	15.5	(SP) Same as above.	PID = 0

Bottom of borehole at 15.5 feet.

WELL DIAGRAM

Casing Type: 1/4" OD Teflon Tubir



AllWest Environmental
2141 Mission Street, Suite 100
San Francisco, CA 94110
Telephone: 415-391-2510

WELL NUMBER SVP-33 A/B

CLIENT Police Credit Union
PROJECT NAME PCU Subsurface
PROJECT NUMBER 202099.23
PROJECT LOCATION 1281 26th Ave., San Francisco, CA
DATE STARTED 8/26/20 **COMPLETED** 8/26/20
GROUND ELEVATION **HOLE SIZE** 2" inches
DRILLING CONTRACTOR ECA (Environmental Control Associates, Inc.)
GROUND WATER LEVELS:
DRILLING METHOD DPT (direct push technology)
AT TIME OF DRILLING ---
LOGGED BY Sam Calloway **CHECKED BY** Len Niles
AT END OF DRILLING ---
NOTES 10" dia conc. core, 6" dia vault box. Set perm SVPs @ 5' and 15' bgs
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0			0.5	Concrete approximately 3" thick.	
		SP	4.0	(SP) Brown fine-grained sand, no odor or staining.	
5		SP	8.0	(SP) Same as above.	PID = 0.1
10		SP	12.0	(SP) Same as above.	PID = 0 PID = 0
15		SP	15.5	(SP) Same as above.	PID = 0

Bottom of borehole at 15.5 feet.

WELL DIAGRAM

Casing Type: 1/4" OD Teflon Tubir

- 6" Traffic rated vault box w/ concrete surface seal
- Cement/grout slurry
- 1/4" OD TeflonTubing
- Dry bentonite granular seal
- 2-inch SS mesh vapor tip
- #2/16 sand filter pack
- Dry bentonite granular seal
- Hydrated granular bentonite seal
- Dry bentonite granular seal
- 2-inch SS mesh vapor tip
- #2/16 sand filter pack

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 9/28/20 16:48 - K:\BENTLEY\PROJECTS\202099.23 PCU SVP-32-33.GPJ

Sub-Slab Cox-Colvin Vapor Pin® Installation Sectional View

Appendix B

Indoor/Outdoor Ambient Air and Soil Vapor Sample Field Log

RMD ENVIRONMENTAL SOLUTIONS

Indoor Air Sampling Form

Project Name: DTSC-Police Credit Union
Project Number: 01-DTSC-007
Location: 26th + 27th Ave. / Irving St.

Sample ID	Canister ID	Location at Site	Date		Time	Summa Vacuum (in. Hg)	Recent remodeling? (Yes/No)	Internal HVAC System (On/Auto/Off)	HVAC/Fan Airflow Observed? (Yes/No)	Comments
IAQ-1271-1	10836	Ground Floor garage	Start	3/3/22	0806	-29	NO	NA	NA	manifold: 11387
			Finish	3/4/22	~~0~~0749	-6				
IAQ-1271-DUP	20364	Ground Floor garage	Start	3/3/22	0806	-29.5	NO	NA	NA	manifold: 9935
			Finish	3/4/22	0749	-4				
IAQ-1271-2	11086	Ground Floor	Start	3/3/22	0812	-29	NO	ON	ON-Yes Heating	manifold: 12022
			Finish	3/4/22	0747	-5				
IAQ-1271-3	21241	upper Floor living Room	Start	3/3/22	0820	-29	NO	ON	ON-Yes Heating	manifold: 10033
			Finish	3/4/22	0743	-6				
OAA-4	11262	1271 BACKYARD	Start	3/3/22	0826	-28	NO	N/A	N/A	manifold: 010034
			Finish	3/4/22	0754	-6				
IAQ-1281-2	9137	upper Floor dinning Room	Start	3/3/22	0904	-27	NO	NA Space Heater	Space Heater	manifold: 10046
			Finish	3/4/22	0857	-3.5				
IAQ-1281-1	Ground Floor living room ⇔ 8043		Start	3/3/22	0906	-30	NO	NA Space Heater	Space Heater	manifold: 5289
			Finish	3/4/22	0902	-7				
IAQ-1280-1	7304	Ground Floor Front Bedroom	Start	3/3/22	1000	-30	NO	ON	ON Heating	manifold: 9709
			Finish	3/4/22	935	-7				
IAQ-1280-2	6944	upper Floor living room	Start	3/3/22	0955	-28	NO	ON	ON Heating	manifold: 10026
			Finish	3/4/22	0931	-4				

RMD ENVIRONMENTAL SOLUTIONS

Indoor Air Sampling Form

Project Name: DTSC-Police Credit Union
Project Number: 01-DTSC-007
Location:

Sample ID	Canister ID	Location at Site	Date		Time	Summa Vacuum (in. Hg)	Recent remodeling? (Yes/No)	Internal HVAC System (On/Auto/Off)	HVAC/Fan Airflow Observed? (Yes/No)	Comments
IAQ-1284-1	7984	Ground Floor kitchen	Start	3/3/22	0942	-30	NO	ON	Yes	manifold: 11412
			Finish	3/4/22	0919	-6				
IAQ-1284-2	10409	upper Floor living room	Start	3/3/22	0937	-28	NO	ON	Yes	manifold: 11396
			Finish	3/4/22	0914	0				
~~OA-5~~ OAA-5	10795	1284 Backyard	Start	3/3/22	0930	-29	NO	NA	Yes - outside	manifold: 12023
			Finish	3/4/22	923	-3				
IAQ-1276-1	11192	Ground Floor living, laundry, & Storage	Start	3/3/22	1027	7 -30	NO	NA	NA	manifold: 5699
			Finish	3/4/22	953	-7				
IAQ-1276-2	8022	upper Floor living Room	Start	3/3/22	1021	-30	NO	ON	Yes - Heating	manifold: 7821
			Finish	3/4/22	951	-6				
IAQ-1275-1	11132	Ground Floor Bathroom	Start	3/3/22	1234	-27.5	NO	NO	NO	manifold: 10013
			Finish	3/4/22	1128	-4				
IAQ-1275-2	10822	upper Floor living and Dining Room	Start	3/3/22	1230	-30	NO	NO	NO Electric Fire place	manifold: 5275
			Finish	3/4/22	1126	-7				
			Start							
			Finish							
			Start							
			Finish							

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3-4-22	Sampler:	BA/EM
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	7638
Sample ID:	VP-1271-1	Manifold ID:	6818
Duplicate Sample ID:	—		
Weather:	OVERCAST	Temperature:	50°

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ~~13"~~ PASS, -20"
Purge Volume:	85 ml	Leak Check Compound: Helium	
Purge Flow Rate:	200 ml/min	Sample Start Time:	~~1049~~ → 1100
Purge Duration:	1 min	Start Vacuum:	-28.5
Purge Start Time:	1046	Sample End Time:	1105
Purge End Time:	1047	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1047	200 ml/min	0.0	28.8	–	PASS

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
~~1049~~ 1100	200	-28.5	16.4	
1101	↓	~~-28~~ -26	16.8	
1102		~~-26~~ -24	21.4	
1103		-22	28.7	
1104		-16	28.5	
1105	↓	-11	27.3	

Notes

IN 0.3 / OUT 0.34 CAN # 8751 INITIAL VAC 23"

6 need new can

Reg 6799

[illegible] 1105 -5 26.0

Sampler's Signature: [signature]

1371 Oakland Boulevard, Suite 200 - Walnut Creek, CA - 94596

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3.3.22	Sampler:	BA/EM
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	8486
Sample ID:	SVP-28A	Manifold ID:	11478
Duplicate Sample ID:	—		
Weather:	light rain	Temperature:	56°

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In 14", PASS
Purge Volume:	2300 ml	Leak Check Compound: Helium	
Purge Flow Rate:	200 ml/min	Sample Start Time:	1554
Purge Duration:	11.6 min	Start Vacuum:	-29
Purge Start Time:	1541	Sample End Time:	1559
Purge End Time:	1553	End Vacuum:	-4

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1541	200	0.2	16.8	1.2	
1544	↓	0.2	18.5	1.1	
1547	↓	0.1	21.5	0.5	
1550	↓	0.1	18.6	0.5	
1553	↓	0.2	16.9	1.1	PASS

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1554	200	-29	21.1	
1555	↓	-24	20.7	
1556	↓	-19	19.6	
1557	↓	-14	20.9	
1558	↓	-9	20.2	
1559	↓	-4	19.4	

Notes

IN 0.2 OUT/AMB 0.2

Sampler's Signature: EyMsl

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3-3-22	Sampler:	EM / BA
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	9318
Sample ID:	~~SVP-28B~~ SVP-28B	Manifold ID:	117[illegible]
Duplicate Sample ID:	—		
Weather:	light rain / OVERCAST	Temperature:	56°

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☑ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In 17", PASS
Purge Volume:	2600 ml	Leak Check Compound: Helium	
Purge Flow Rate:	200 ml/min.	Sample Start Time:	1422
Purge Duration:	13 min	Start Vacuum:	-29
Purge Start Time:	1607	Sample End Time:	~1426
Purge End Time:	1620	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1607	200	0.0	24.0	—	
1610	↓	0.0	26.4	—	
1613		0.0	20.7	—	
1616		0.0	22.0	—	
1620		0.0	22.0	—	PASS

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1422	200 ml/min	-29	20.8 %	
1423		-24	20.4 %	
1424		-18	22.7 %	
1425		-12	22.1 %	
1426		-5	21.8 %	

Notes

OUT 0.3, IN 0.2

Sampler's Signature: B. A[illegible]

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/4/22	Sampler:	B. Angelo and E. Male
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	9369
Sample ID:	SVP-29 IA	Manifold ID:	M163
Duplicate Sample ID:	–		
Weather:	Mostly Sunny, WINDY	Temperature:	54°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☑ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In -19Hg hold
Purge Volume:	2,300 mL	Leak Check Compound: Helium	
Purge Flow Rate:	~~to~~ 200 mL/min	Sample Start Time:	1220
Purge Duration:	11.6 min	Start Vacuum:	-30
Purge Start Time:	1207	Sample End Time:	~~1224~~ 1225
Purge End Time:	1219	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1207	200ml/min	0.1	28.2	0.35	
1210		0.1	22.8	0.4	
1213		0.0	18.5	–	
1216		0.0	16.5	–	
1219		0.0	9.8	–	PASS

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1221	200ml/min	-25	24.9 %	
1222		-20	20.4 %	
1223		-15	22.7 %	
1224		-10	20.4 %	
1225		-5	19.7 %	

Notes

IN 0.1 | OUT 0.2

Sampler's Signature: B. Angelo

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/4/22	Sampler:	B. Angelo
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	7904
Sample ID:	SVP-29B	Manifold ID:	11476
Duplicate Sample ID:			
Weather:	Partly Cloudy	Temperature:	54°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☑ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In -14 hold ; good
Purge Volume:	2,600 mL	Leak Check Compound: Helium	
Purge Flow Rate:	200 mL/min	Sample Start Time:	1245
Purge Duration:	13 min	Start Vacuum:	-29
Purge Start Time:	1232	Sample End Time:	1249
Purge End Time:	1245	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1235	200 mL/min	0.1	20.5 %	0.49 %	
1238		0.1	20.0 %	0.5 %	
1241		0.1	21.3 %	0.47 %	
1244		0.1	20.7 %	0.48 %	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1246	200 mL/min	-23	21.6 %	
1247		-17	21.3 %	
1248		-11	20.9 %	
1249		-5	21.0 %	

Notes

Out: 00.2 in: 00.1

Sampler's Signature: B. Angelo

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/4/22	Sampler:	B. Arango and E. Neale
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	7374 | Dup: 12407
Sample ID:	~~SVP-30A~~ SVP-30A	Manifold ID:	7860 | Dup: 11487
Duplicate Sample ID:	SVP-30A-DUP		
Weather:	Mostly Sunny Really windy	Temperature:	54°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☑ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In	
Purge Volume:	2300mL	Leak Check Compound: Helium		
Purge Flow Rate:	200 mL/min	Sample Start Time:	1324	Dup. 1324
Purge Duration:	11.6 min	Start Vacuum:	-28	-29
Purge Start Time:	1305	Sample End Time:	1328	1328
Purge End Time:	1316	End Vacuum:	-4	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1308	200mL/min	00.0	16.1%	—	
1311		0.1	17.1	0.58%	Pass ✓
1314				—	
1316				—	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Dup	Helium in Shroud (%)	Comments
1324	200mL/min	-28	-29	22.1	
1325		-22	-25	20.4	
1326		-16	-19	19.5	
1327		-10	-14	19.8	
1328		-6	-10	~~19.~~ 20	
1328		~~-5~~ -4	-5	19.5	

Notes

In: 00.1 out 00.3 | Need to replace can for Duplicate can read @-12Hg.

Sampler's Signature: [signature]

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/4/22	Sampler:	B. Angelo and E. Marle
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	10690
Sample ID:	~~SVP 30B~~ SVP-30B	Manifold ID:	20684
Duplicate Sample ID:			
Weather:	Mostly Sunny - High winds	Temperature:	54°F
Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days?		No ☑ Yes ☐ Rainfall ________ in.	
If no, proceed with collection of sample. If yes, contact PM.			
Sampling Device:	1L Summa	Leak Test:	Shut-In -15 Hg Hold good ✓
Purge Volume:	2,600mL	Leak Check Compound: Helium	
Purge Flow Rate:	200mL/min	Sample Start Time:	1355
Purge Duration:	13min	Start Vacuum:	-29
Purge Start Time:	1341	Sample End Time:	1359
Purge End Time:	1354	End Vacuum:	-4

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1344	200mL/min	00.1	20.8	0.48%	
1347		00.1	21.7	0.46%	
1350		00.0	20.4	—	
1353		0	20.0	—	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1356	200mL/min	-24	22.6 %	
1357		-18	22.2%	
1358		-12	21.7%	
1359		-5	21.1%	

Notes

Sampler's Signature: B. Angelo

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/2/22	Sampler:	B. Angulo
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	11844
Sample ID:	SVP-31A	Manifold ID:	011125
Duplicate Sample ID:	N/A		
Weather:	Haze	Temperature:	61°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No [X] Yes [ ] Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In -11" ~~1343~~
Purge Volume:	~2,300ml	Leak Check Compound: Helium	
Purge Flow Rate:	200ml/min	Sample Start Time:	1357
Purge Duration:	~11.6 min	Start Vacuum:	-29
Purge Start Time:	1342	Sample End Time:	1402
Purge End Time:	1354	End Vacuum:	-4

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1342	200ml/min	Ø	23.9	–	
1345	"	0.1	17.5	~0.6%	
1348	"	0.2	22.0	~0.9%	
1351	"	0.2	23.4	~0.85%	
1354	"	0.1	21.7	~0.46%	PASS

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1357	200ml/min	-29	18.7	
1358	"	-24	17.3	
1359	"	-19	20.7	
1400	"	-14	20.3	
1401	"	-9	20.4	
1402	"	-4	23.4	

Notes

In start @ 00.2 out start @ 00.2

Sampler's Signature: [signature]

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/2/22	Sampler:	B. Angulo
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	8905
Sample ID:	SVP-31B	Manifold ID:	6814
Duplicate Sample ID:	—		
Weather:	Partly Cloudy	Temperature:	62 °F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No [X] Yes [ ] Rainfall _________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In -10"
Purge Volume:	2,600 mL	Leak Check Compound: Helium	
Purge Flow Rate:	200 mL/min	Sample Start Time:	1435
Purge Duration:	13 min	Start Vacuum:	-29
Purge Start Time:	1417	Sample End Time:	1440
Purge End Time:	1430	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1417	200	~~10.4~~ 0.5	~~4.5~~ 18.4	2.7%	PAUSE PURGE, FIX MANIFOLD
~~1423~~ 1427	"	0.3	26.3	1.1%	
1431	"	0.2	21.2	0.9%	
1433	"	0.1	28.1	0.4%	PASS

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1435	200	-29	19.0	
1436	"	-24	18.9	
1437	"	-19	23.5	
1438	"	-14	20.6	
1439	"	-10	20.1	
1440	"	-5	19.7	

Notes

OUT START 0.3

IN START 0.2

Sampler's Signature: [signature]

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RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/3/22	Sampler:	B. Angulo
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	5706
Sample ID:	SVP-32A	Manifold ID:	7441
Duplicate Sample ID:	—		
Weather:	Showers	Temperature:	52°F
Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days?		No ☑ Yes ☐ Rainfall ______ in.	
If no, proceed with collection of sample. If yes, contact PM.			
Sampling Device:	1L Summa	Leak Test:	Shut-In 5", PASS
Purge Volume:	2,300 mL	Leak Check Compound: Helium	
Purge Flow Rate:	200 mL/min	Sample Start Time:	1326
Purge Duration:	11.6 min	Start Vacuum:	-29
Purge Start Time:	1313	Sample End Time:	1331
Purge End Time:	1324	End Vacuum:	-4

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1315	200mL/min	17.7	00.1	0.56 %	
1317	↓	21.4	00.0	0	
1319		20.3	00.0	0	
1321		20.0	00.0	0	
1323		19.4	00.0	0	PASS

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1326	200mL/min	-29	19.7	
1327	↓	-24	19.8	
1328		-19	17.3	
1329		-14	20.0	
1330		-9	21.6	
1331		-4	20.5	

Notes

Inside analyzer start @ 00.3 out: 00.2 ~~[illegible]~~ w/O ZIPTIE

SVP-32A: SHORTER TUBING

SVP-32 B:

Sampler's Signature: B. Angulo

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/3/22	Sampler:	B.Arsenio / E.Mule
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	21237
Sample ID:	SVP-32B	Manifold ID:	i1471
Duplicate Sample ID:	--		
Weather:	Showers (light)	Temperature:	52°

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In 21", PASS
Purge Volume:	2,600mL	Leak Check Compound: Helium	
Purge Flow Rate:	200mL/min	Sample Start Time:	1358
Purge Duration:	~13min	Start Vacuum:	-28
Purge Start Time:	1343	Sample End Time:	1403
Purge End Time:	1356	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1343	200	~~0.3~~ 0.1	18.0	~0.6	
1346	↓	0.1	21.1	~0.5	
1349		0.1	17.3	~0.6	
1352		0.1	16.6	~0.6	PASS
1356		0.0	18.4	0	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1358	200	-28	17.1	
1359	↓	-24	16.4	
1400		-20	20.2	
1401		-16	19.8	
1402		-10	28.0	
1403		-5	20.3	

Notes

ANALYZER OUT: 0.2, AMBIENT 0.0 w/ ziptie longer tubing

Sampler's Signature: EMule

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RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/3/22	Sampler:	B. Angulo / E. Male	
Client:	DTSC	Project #:	01-DTSC-007	
Container Type:	1-L Summa	Container ID:	7364	Dup: 6069
Sample ID:	~~SVP-33A~~ SVP-33A	Manifold ID:	11470	Dup: 11488
Duplicate Sample ID:	SVP-33A-Dup			
Weather:	Mostly Cloudy	Temperature:	54°F	

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☑ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In -12 Hg hold	
Purge Volume:	2,300 mL	Leak Check Compound: Helium		
Purge Flow Rate:	200 mL/min	Sample Start Time:	1445	
Purge Duration:	11.6 min	Start Vacuum:	-30	-28 Dup
Purge Start Time:	1430	Sample End Time:	-5	-3 Dup
Purge End Time:	1442	End Vacuum:	1450	1449 Dup

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1430	200	0.2	16.4	1.2	
1433	↓	0.1	21.9	0.5	
1436		0.1	21.4	0.5	
1439		0.2	23.8	0.8	
1442		0.0	23.0	0	PASS

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Time Dup	Flow Rate (mL/min)	Vacuum (in Hg)	Vacuum Dup	Helium in Shroud (%)	Comments
1446	1446	200	-25	-22	18.3%	
1447	1447	↓	-20	-17	19.2%	
1448	1448		-15	-12	20.2%	
1449	1449		-10	-8	21.3%	
1450	1449		-5	-4	20.0%	

Notes

out: 00.2 in: 00.3

Sampler's Signature: B. Angulo

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	3/3/22	Sampler:	B. Angulo / E. Male
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	10415
Sample ID:	SVP-33B	Manifold ID:	11457
Duplicate Sample ID:			
Weather:	Mostly Cloudy	Temperature:	55°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☐ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In
Purge Volume:	2,600 mL	Leak Check Compound: Helium	
Purge Flow Rate:	200 mL/min	Sample Start Time:	1518
Purge Duration:	13 min	Start Vacuum:	-30
Purge Start Time:	1504	Sample End Time:	1523
Purge End Time:	1517	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1507	200 mL/min	00.4	22.4 %	1.7 %	
1510		00.2	25.5 %	0.7 %	
1513		00.2	21.1 %	0.95 %	
1516		00.2	22.2	0.90 %	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1519	200 mL/min	-25	23.3 %	
1520		-20	23.0 %	
1521		-15	22.2 %	
1522		-10	22.3 %	
1523		-5	22.0 %	

Notes

Out: 00.2 In: 00.1

Sampler's Signature: [signature]

RMD ENVIRONMENTAL SOLUTIONS

Indoor Air Sampling Form

Project Name: DTSC - PCU
Project Number: 3032.1001.0
Location: 26th+27th Ave, San Francisco

Sample ID	Canister ID	Manifold ID	Location at Site	Date		Time	Summa Vacuum (in. Hg)	Recent remodeling? (Yes/No)	Internal HVAC System (On/Auto/Off)	HVAC/Fan Airflow Observed? (Yes/No)	Comments
IAQ-1271-3	10983	22735	Upper Dining room	Start	2/1/23	0853	-27	No	*	No	
				Finish	2/2/23	0803	-5				
OAA-4	11271	22175	backyard picnic table	Start	2/1/23	0857	-29	No	*	No	
				Finish	2/2/23	0908	-5				
IAQ-1271-2	12128	6765	Ground kitchen (Pantry)	Start	2/1/23	0903	-30	No	*	No	
				Finish	2/2/23	0811	-0				
IAQ-1271-1	8039	6359	Ground Floor Garage	Start	2/1/23	0906	-28	No	*	No	
				Finish	2/2/23	0813	-5				
IAQ-1271-DUP	10816	22743	"	Start	2/1/23	0906	-29	No	*	No	
				Finish	2/2/23	0812	-8				
dining table IAQ-1281-2	7937	6447	Upper dining table	Start	2/1/23	0921	-30	No	*	No	
				Finish	2/2/23	0844	-5				
dresser IAQ-1281-1	7943	011796	Ground Living room	Start	2/1/23	0925	-29	No	*	No	
				Finish	2/2/23	0843	-5				
bathroom IAQ-1281-3	11652	9450	Ground Bathroom	Start	2/1/23	0927	-30	No	*	No	
				Finish	2/2/23	0845	-5				
IAQ-1284-2	8008	22558	Upper Living room	Start	2/1/23	0952	-28	No	*	No	
				Finish	02/02/23	0918	-22				

* heating only

RMD ENVIRONMENTAL SOLUTIONS

Indoor Air Sampling Form

Project Name: Police Credit Union
Project Number: 3032.1001.0
Location: 26th + 27th Ave, San Francisco

Sample ID	Canister ID	Manifold ID	Location at Site		Date	Time	Summa Vacuum (in. Hg)	Recent remodeling? (Yes/No)	Internal HVAC System (On/Auto/Off)	HVAC/Fan Airflow Observed? (Yes/No)	Comments
IAQ-1275-2	11062	5320	Upper story room Cochran	Start	2/1/23	1533	-30	No	*	No	
				Finish	2/2/23	1445	-6				
IAQ-1275-1	12415	27319	Ground Floor Bathroom	Start	2/1/23	1510	-29	No	*	No	
				Finish	2/2/23	1447	-5				
IAQ-1275-3	10870	5997	Ground Floor Office - Tuttle	Start	2/1/23	1545	-30	No	*	No	
				Finish	2/2/23	1446	-5				
				Start							
				Finish							
				Start							
				Finish							
				Start							
				Finish							
				Start							
				Finish							
				Start							
				Finish							
				Start							
				Finish							

* heating only

RMD ENVIRONMENTAL SOLUTIONS

Indoor Air Sampling Form

Project Name: Police Credit Union
Project Number: 3032.1001.0
Location: 26th + 27th Ave, San Francisco

21275

Sample ID	Canister ID	Manifold ID	Location at Site		Date	Time	Summa Vacuum (in. Hg)	Recent remodeling? (Yes/No)	Internal HVAC System (On/Auto/Off)	HVAC/Fan Airflow Observed? (Yes/No)	Comments
IAQ-1284-3	6567	6330	Ground Bathroom	Start	2/1/23	0958	-29	No	*	No	
				Finish	02/02/23	0916	-5				
IAQ-1281-1	11159	~~[illegible]~~	Ground kitchen	Start	2/1/23	1000	-30	No	*	No	
				Finish	02/02/23	0915	-7				
OAA5	10849	6706	Backyard Bench	Start	2/1/23	1003	-29	No	*	No	
				Finish	02/02/23	0928	-5				
IAQ-1286-2	21528	22727	Upper Living Mantle	Start	2/1/23	1018	-29	No	*	No	
				Finish	02/02/23	0942	-5				
IAQ-1285-1	11063	22725	Ground Floor Living	Start	2/1/23	1023	-30	No	*	No	
				Finish	02/02/23	0945	-8				
OAA-6	10443	22792	Backyard Fence	Start	2/1/23	1030	-29	No	*	No	
				Finish	02/02/23	0950	-3				
IAQ-1287-2	10846	5888	Upper Living (Mantle)	Start	2/1/23	1305	-29	No	*	No	
				Finish	02/02/23	1216	-8				
IAQ-128-1	21113	22741	Ground Floor bedroom	Start	2/1/23	1310	-30	No	*	No	
				Finish	2/2/23	1218	0				
				Start				No	*	No	
				Finish							

* Heating only

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	2/2/23	Sampler:	
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1L Summa	Container ID:	021508
Sample ID:	SVP-28A	Manifold ID:	005972
Duplicate Sample ID:			
Weather:	Cloudy	Temperature:	40°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In
Purge Volume:	2 300 mL	Leak Check Compound:	Helium
Purge Flow Rate:	200 mL/min	Sample Start Time:	1021
Purge Duration:	11.6	Start Vacuum:	-30
Purge Start Time:	1008	Sample End Time:	1029
Purge End Time:	1020	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1008	200 mL/min	0.2	25.4	~1%	
1009		0.3	21.3	~1%	
1010		0.4	25.6	~1%	
1011		0.2	22.6	~1%	
1012		0.1	24.6	~1%	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1021	200 mL/min	-30	23.3	
1022		-25	22.5	
1023		-20	20.4	
1024		-17	21.5	
1025		-15	22.6	
1026		-12	20.1	

Notes

1027		-10	28.6	
1028		-7	22.9	
1029		-5	23.0	

Sampler's Signature: [signature]

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	2/2/23	Sampler:	TW
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1L Summa	Container ID:	022189
Sample ID:	SVP-28B	Manifold ID:	006799
Duplicate Sample ID:			
Weather:	Partly cloudy	Temperature:	43°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ✓
Purge Volume:	2,600 mL	Leak Check Compound:	Helium
Purge Flow Rate:	200 mL/min	Sample Start Time:	1102
Purge Duration:	13 min	Start Vacuum:	-28
Purge Start Time:	1048	Sample End Time:	1107
Purge End Time:	1101	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1048	200 mL/min	0.1	27.4	~0.4	
1049	↓	0.1	28.4	~0.4	
1050		0.1	25.8	~0.4	
1051		0.1	26.5	~0.4	
1052	↓	0.1	21.7	~0.4	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1102	200mL/min	-28	18.5	
1103	↓	-23	20.1	
1104		-18	21.2	
1105		-13	18.3	
1106		-8	21.3	
1107	↓	-5	20.4	

Notes

Sampler's Signature: [signature]

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	2/1/23	Sampler:	[signature]
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1L Summa	Container ID:	010656
Sample ID:	SVP-29A	Manifold ID:	011123
Duplicate Sample ID:			
Weather:	Sunny	Temperature:	53°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ✓
Purge Volume:	2,300 mL	Leak Check Compound:	Helium
Purge Flow Rate:	200 mL/min	Sample Start Time:	1554
Purge Duration:	11.6 min	Start Vacuum:	-30
Purge Start Time:	1541	Sample End Time:	1559
Purge End Time:	1553	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1541	200 mL/min	0.1	27.4	~0.4	
1542	↓	0.1	40.6	~0.4	
1543	↓	0.1	36.8	~0.4	
1544	↓	0.1	29.8	~0.4	
1545	↓	0.1	19.4	~0.4	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1554	200 mL/min	-30	27.6	
1555	↓	-25	25.3	
1556	↓	-20	20.9	
1557	↓	-15	27.3	
1558	↓	-10	26.4	
1559	↓	-5	26.5	

Notes

Sampler's Signature: [signature]

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	2/2/23	Sampler:	[illegible]
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1L Summa	Container ID:	00 5173
Sample ID:	SVP-29B	Manifold ID:	00 7462
Duplicate Sample ID:			
Weather:	Partly cloudy	Temperature:	43°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☐ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ✓
Purge Volume:	2,600	Leak Check Compound:	Helium
Purge Flow Rate:	200mL/min	Sample Start Time:	1220
Purge Duration:	13 min	Start Vacuum:	-28
Purge Start Time:	1205	Sample End Time:	1225
Purge End Time:	1218	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1205	200mL/min	0.0	24.3	0	
1206		0.0	29.3	0	
1207		0.0	24.1	0	
1208		0.1	29.7	~0.33	
1209		0.0	25.3	0	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1220	200mL/min	-28	18.3	
1221		-23	20.5	
1222		-18	26.4	
1223		-12	23.4	
1224		-8	25.3	
1225		-5	22.3	

Notes

Sampler's Signature: [illegible signature]

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Soil Vapor Field Measurement Log

RMD ENVIRONMENTAL SOLUTIONS

Date:	2/2/23	Sampler:	TN
Client:	DTSC	Project #:	01-DTSC - 007
Container Type:	1L Summa	Container ID:	008917
Sample ID:	SVP-30A	Manifold ID:	011460
Duplicate Sample ID:	SVP-30A-Dup	Dup container ID: 012432	
Weather:		Temperature:	

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ✓
Purge Volume:	2,300 mL	Leak Check Compound:	Helium
Purge Flow Rate:	200 mL/min	Sample Start Time:	1305
Purge Duration:	11.6	Start Vacuum:	-28
Purge Start Time:	1251	Sample End Time:	1317
Purge End Time:	1303	End Vacuum:	-6

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1251	200mL/min	0.0	33.4	0	Had to change
1252		0.0	28.9	0	Helium meter
1253		0.0	36.2	0	batteries
1301		0.0	43.2	0	
1302		0.0	39.3	0	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	~~Flow Rate~~ Vacuum (inHg) ~~(mL/min)~~	Flow ~~Vacuum~~ Rate (mL/min) ~~(in Hg)~~	Helium in Shroud (%)	Comments
1305	-28	200 mL/min	26.4	
1306	-25		16.8	
1307	-22		25.8	
1308	-20		22.4	
1309	-17		20.0	
1310	-13		29.8	
1311	-12		21.0	
1312	-11		22.0	
1313	-10		24.8	
1314	-9		16.9	
~~1316~~ 1315	-8		23.4	
1316	-7		20.4	
1317	-6		21.3	

Notes

Sampler's Signature: [signature]

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	02/02/23	Sampler:	BE
Client:	DTSC	Project #:	01- DTSC - 007
Container Type:	1-L Summa	Container ID:	006410
Sample ID:	SVP-30B	Manifold ID:	011460
Duplicate Sample ID:	—		
Weather:	sunny	Temperature:	47°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ✓
Purge Volume:	2,300 mL	Leak Check Compound:	Helium
Purge Flow Rate:	200 mL/min	Sample Start Time:	12 38
Purge Duration:	11.6 min	Start Vacuum:	-29
Purge Start Time:	12 24	Sample End Time:	12 43
Purge End Time:	12 36	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
12 27	200	~~21.8~~ 0.0	21.8	0	
12 28		~~26.4~~ 0.0	26.4	0	
12 29		~~18.4~~ 0.0	18.4	0	
12 31		~~10.4~~ 0.0	10.4	0	
12 32		~~3.2~~ 0.0	3.2	0	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
12 38	200	-29	22.5	
12 39		-25	26.5	
12 40		-20	22.4	
12 41		-15	21.3	
12 42		-10	20.6	
12 43		-5	8.9	

Notes

Sampler's Signature:

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	02/01/23	Sampler:	Jesse Thornton
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	005461
Sample ID:	SVP-31A	Manifold ID:	011481
Duplicate Sample ID:			
Weather:	Sunny	Temperature:	38°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ________ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In
Purge Volume:		Leak Check Compound: Helium	
Purge Flow Rate:	200 mL/min	Sample Start Time:	0958
Purge Duration:	11.6	Start Vacuum:	-29.0
Purge Start Time:	0945	Sample End Time:	1002
Purge End Time:	0956	End Vacuum:	-5.0

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
0945	200 mL/min	0.4	24.6	~1.2%	
0946		0.4	22.9	~1.2%	
0947		0.4	21.7	~1.2%	
0948		0.4	22.3	~1.2%	
0949		0.4	22.5	~1.2%	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
0958	200mL/min	-29.9	33.3	
0959		-20.0	30.8	
1000		-15.0	18.8	
1001		-10.0	34.9	
1002		-5.0	20.2	

Notes

Sampler's Signature: [signature]

2/1/23: SVP-31B tubing was flooded. No soil vapor sample collected

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	2/1/23	Sampler:	[signature]
Client:	DTSC	Project #:	01- DTSC - 007
Container Type:	1-L Summa	Container ID:	022548
Sample ID:	SVP - 32A	Manifold ID:	007461
Duplicate Sample ID:			
Weather:	Sunny	Temperature:	45° F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ✓
Purge Volume:	2,300 mL	Leak Check Compound:	Helium
Purge Flow Rate:	200 mL min	Sample Start Time:	1108
Purge Duration:	11.6 min	Start Vacuum:	-30
Purge Start Time:	1054	Sample End Time:	1112
Purge End Time:	1106	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1054	200 mL/min	0.0	35.4	0	
1055	↓	0.0	16.7	0	
1056		0.0	22.4	0	
1057		0.0	15.7	0	
1058		0.0	17.3	0	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1108	200 mL/min	-30	35.4	
1109	↓	-25	17.8	
1110		-15	25.4	
1111		-10	16.4	
1112		-5	31.9	

Notes

Sampler's Signature: [signature]

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	02/01/23	Sampler:	JT
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1-L Summa	Container ID:	010 752
Sample ID:	SVP - 32B	Manifold ID:	00 68 24
Duplicate Sample ID:			
Weather:		Temperature:	
Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days?		No ☐ Yes ☐ Rainfall ______ in.	
If no, proceed with collection of sample. If yes, contact PM.			
Sampling Device:	1L Summa	Leak Test: Helium	Shut-In ✓
Purge Volume:		Leak Check Compound: Helium	
Purge Flow Rate:	200 mL/Min	Sample Start Time:	1151
Purge Duration:	13	Start Vacuum:	-28
Purge Start Time:	11 37	Sample End Time:	1156
Purge End Time:	11 50	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
11 38		0	21.3	0	
11 39		0	31.1	0	
11 40		0	22.3	0	
11 41		0	17.2	0	
11 42		0	17.9	0	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1151		-28	21.3	
1152		-23	15.4	
1153		-18	30.7	
1154		-13	22.7	
1155		-8	15.4	
1156		-5	27.9	

Notes

Sampler's Signature: [signature]

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RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	2/1/23	Sampler:	[illegible]
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1L Summa	Container ID:	main container 005631
Sample ID:	SVP-33A	Manifold ID:	007860
Duplicate Sample ID:	SVP-33A-Dup	Dup container	010632
Weather:	Sunny	Temperature:	52°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☐ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ✓
Purge Volume:	Helium	Leak Check Compound:	Helium
Purge Flow Rate:	200 ml/min	Sample Start Time:	1323
Purge Duration:	~~1310~~ 11.6 min	Start Vacuum:	-28
Purge Start Time:	1310	Sample End Time:	1330
Purge End Time:	1322	End Vacuum:	-6

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1310	200 mL/min	0.0	17.8	0	
1311	↓	0.0	22.4	0	
1312		0.0	40.3	0	
1313		0.0	19.81	0	
1314		0.0	36.8	0	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1323	200 mL/min	-28	22.9	
1324	↓	-25	38.2	
1325		-22	28.5	
1326		-18	28.4	
1327		-15	22.8	
1328		-12	15.3	

Notes

1329	↓	-9	29.2	
1330		-6	33.2	

Sampler's Signature: [signature]

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RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	2/1/23	Sampler:	[illegible]
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1L Summa	Container ID:	022260
Sample ID:	SVP-33B	Manifold ID:	011485
Duplicate Sample ID:			
Weather:	sunny	Temperature:	52°F

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ✓
Purge Volume:	2,600 mL	Leak Check Compound:	Helium
Purge Flow Rate:	200 mL/min	Sample Start Time:	1411
Purge Duration:	13 min	Start Vacuum:	-30
Purge Start Time:	1357	Sample End Time:	1416
Purge End Time:	1410	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1357	200 mL/min	0.0	16.4	0	
1358	↓	0.0	15.8	0	
1359	↓	0.0	21.0	0	
1400	↓	0.0	16.7	0	
1401	↓	0.0	18.6	0	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1411	200 mL/min	-30	24.6	
1412	↓	-25	18.0	
1413	↓	-20	28.7	
1414	↓	-15	16.2	
1415	↓	-10	17.7	
1416	↓	-5	28.5	

Notes

Sampler's Signature: [signature]

RMD ENVIRONMENTAL SOLUTIONS

Soil Vapor Field Measurement Log

Date:	2/2/23	Sampler:	Eric T. / [illegible]
Client:	DTSC	Project #:	01-DTSC-007
Container Type:	1 L Summa	Container ID:	008512
Sample ID:	VP-1271-1	Manifold ID:	007727
Duplicate Sample ID:			
Weather:	Partly cloudy	Temperature:	55°

Precipitation: Has it rained >0.5 inch during a 24-hour period in the last 5 days? No ☒ Yes ☐ Rainfall ______ in.

If no, proceed with collection of sample. If yes, contact PM.

Sampling Device:	1L Summa	Leak Test:	Shut-In ✓
Purge Volume:	600 mL	Leak Check Compound:	Helium
Purge Flow Rate:	200 mL/min	Sample Start Time:	1341
Purge Duration:	3 min	Start Vacuum:	-30
Purge Start Time:	1339	Sample End Time:	1346
Purge End Time:	1341	End Vacuum:	-5

Field Measurements

Purge

Time	Flow Rate (mL/min)	Helium In-Line (%)	Helium in Shroud (%)	Helium Ratio* (%)	Comments
1339	200 mL/min	0.0	20.0	0	
1340	200	0.0	32.0	0	
1341	200	0.0	24.0	0	

*If ratio of in-line helium to shroud helium is >5%, stop work and notify project manager before collecting sample.

Sample Collection

Time	Flow Rate (mL/min)	Vacuum (in Hg)	Helium in Shroud (%)	Comments
1341	200 mL/min	-30	29.0	
1342	200	-22	23.6	
1343	200	-17	27.7	
1344	200	-12	22.0	
1345	200	-7	19.0	
1346	200	-5	15.0	

Notes

Sampler's Signature: [signature]

Appendix C

Building Survey and Interview Form

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1271 26th Ave
Site/Facility Name:	Residential
Screening Event Date:	3/2/22
Screening Event Time:	0810
Event Weather Conditions:	Mostly Cloudy ; 49°F
Name of Person(s) Conducting Sampling:	B. Angulo and Erin Male
Company Conducting Sampling:	RMD Environmental Solutions INC.
Field Instrument Type[1] (List All):	ppb RAE 3000
Instrument Calibration Date:	3/1/22

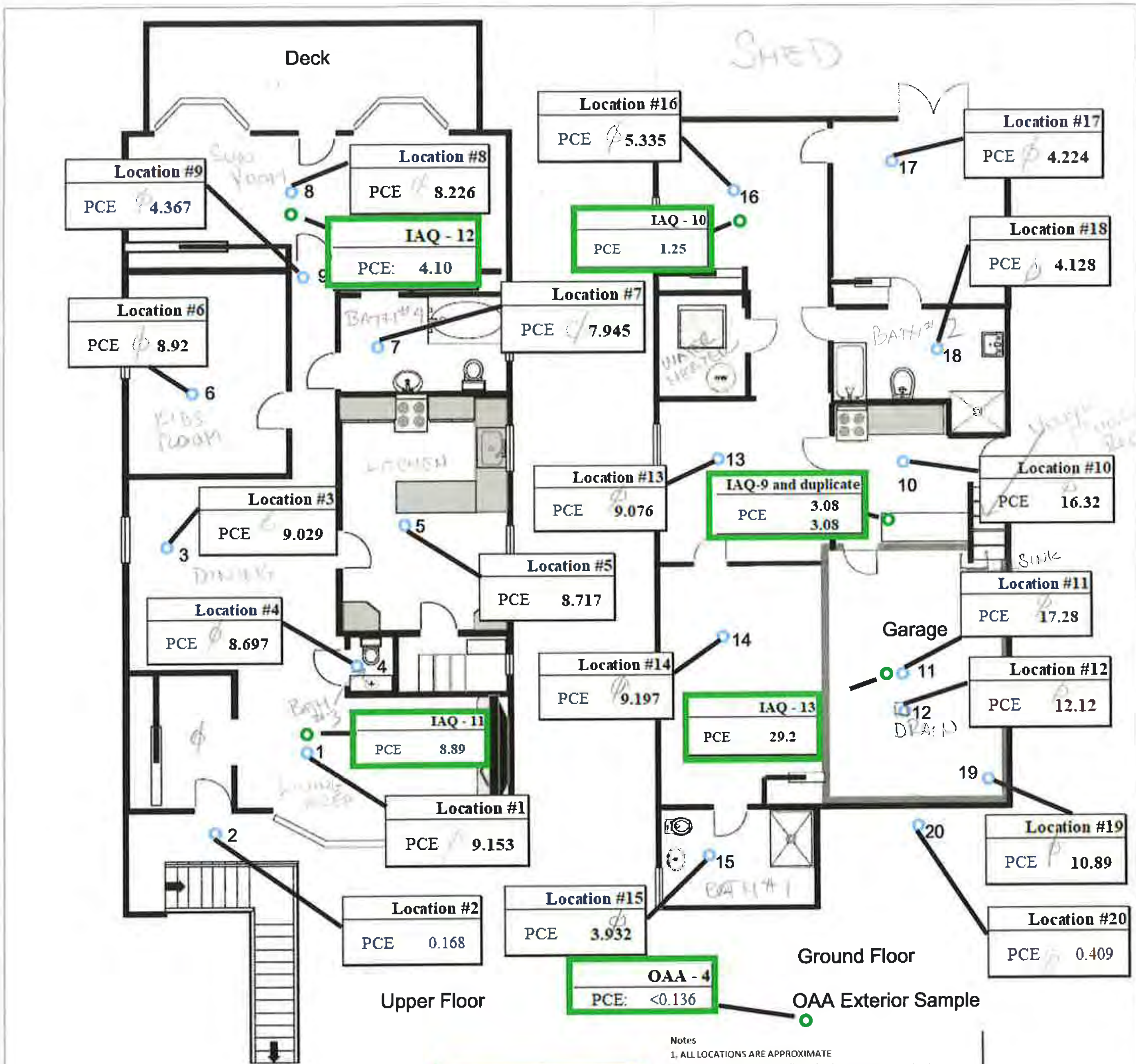
1 - Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- GARAGE	- BREATHING ZONE (BZ)		Ø	ppb	LAUNDRY DETERGENT, GLUE, GROUT
-	- NEAR DRAIN		Ø		PAINTING MEDIUM
-	- NEAR SINK		Ø		
- KITCHEN	- BREATHING ZONE		Ø		
- BED/GROUND FLOOR	- BZ		Ø		
- BATH #1	- BZ		Ø		
- BATH #2	- BZ		Ø		PERFUME
-	- SINK/DRAINS		Ø		
- LIVING AREA	- BZ		Ø		PAINTING W/ OIL PAINTS
- UPPER FLOORS	-				[illegible] VARNISH ON OLDER
- KITCHEN	- BZ		Ø		PAINTINGS
-	- SINK/DRAIN		Ø		
- BATH #3	- BZ		Ø		
-	- SINK/SHOWER		Ø		
- LIVING ROOM	- BZ		Ø		
- DINING ROOM	- BZ		Ø		
-	- HEATING VENT		Ø		
- KIDS BEDROOM	- BZ		Ø		
- BATH #4	- BZ		Ø		
-	- SINK		Ø		
-	- SHOWER		Ø		
- SUN ROOM	- BZ		Ø		
-	- VENTS		Ø		
- BACKYARD	- OUTSIDE		Ø		
- SHED	- BZ (AFTER REMOVING		Ø		
-	- ACETONE & PAINT)				
- [illegible] IN SHED	-		647		GLUE FOR VINYL FLOORING
-	-				
-	-				
-	-				
-	-				

Comments:

HEATING SET TO 68°, BOX OF PAINTS IN SHED
JAR OF ACETONE (UNLABELED) = [illegible] 1194 – 38.84 ppm
ONCE ACETONE/PAINT REMOVED => Ø



LEGEND

HAPSITE Sampling Location

AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
September 15, 2021	
SVP-31A (5 ft. bgs)	146
SVP-31B (15 ft. bgs)	282
March 3, 2021	
SVP-31A (5 ft. bgs)	130
SVP-31B (15 ft. bgs)	310
September 3, 2020	
SVP-31A (5 ft. bgs)	150
SVP-31B (15 ft. bgs)	290

Notes
1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate.
3. All values are given in units of µg/m3.
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 µg/m3.
5. A bold result indicates an exceedance of the screening level for PCE.
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house.
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions
bgs: below ground surface
ft: feet
PCE: tetrachloroethene
µg/m3: micrograms per cubic meter

ELEVATE ENVIRONMENTAL CONSULTANTS INC

1271 26th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 14 and 15, 2021
San Francisco, CA

Figure
2D

DRAFTER: KP/MV/JB

DATE: 10/20/2021

CONTRACT NO.: 21-073A

ϕ = No VOCs detected w/ ppbRae

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1275 26th AVE
Site/Facility Name:	RESIDENTIAL
Screening Event Date:	3/2/22
Screening Event Time:	1115
Event Weather Conditions:	Mostly Cloudy; 50°F
Name of Person(s) Conducting Sampling:	B. ANGULO + E MALE
Company Conducting Sampling:	RMD ENVIRONMENTAL SOLUTIONS
Field Instrument Type[1] (List All):	PPbRAE 3000
Instrument Calibration Date:	3/1/22

1 - Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- Living Room	- Breathing Zone		∅	PPB	
- Dining Room	- BZ		∅		
- Kitchen	- BZ / Sink		∅		
- Bath #1	- BZ / Sink / Shower		∅		
- Bed #1	- BZ		∅		
- Bed #2	- BZ		∅		
- Laundry	- BZ		∅		
- Garage	- BZ		∅		Paints, Water sealant
- [illegible]	- BZ		∅		
- Bed #3	- BZ		∅		
- Bath #2	- BZ		∅		
- "	- Sink		∅		
- "	- Shower		∅		
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				

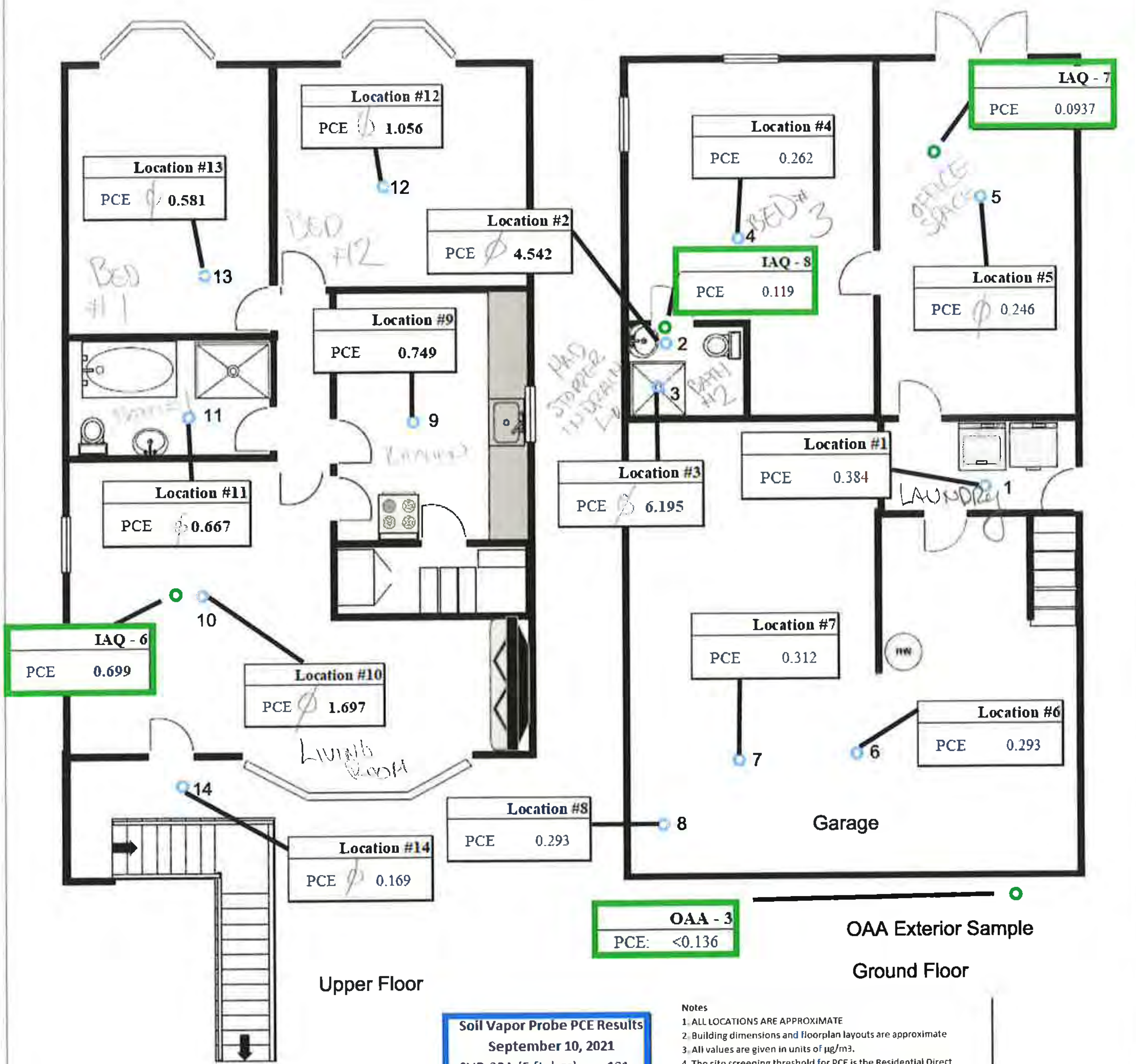
Comments:

Heating: [illegible]

Natural Gas Fireplace

Drain in lower bathroom had stopper

Ground Floor | Upper Floor



Soil Vapor Probe PCE Results	
September 10, 2021	
SVP-32A (5 ft. bgs)	121
SVP-32B (15 ft. bgs)	215
SVP-32B (15 ft. bgs) duplicate	208
March 3, 2021	
SVP-32A (5 ft. bgs)	91
SVP-32B (15 ft. bgs)	380
September 3, 2020	
SVP-32A (5 ft. bgs)	59
SVP-32B (15 ft. bgs)	200

Notes

1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate
3. All values are given in units of µg/m3.
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 µg/m3.
5. A bold result indicates an exceedance of the screening level for PCE
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted

Definitions

bgs: below ground surface
ft: feet
PCE: tetrachloroethene
µg/m3: micrograms per cubic meter

LEGEND

- HAPSITE Sampling Location
- AllWest SUMMA Can Sampling Location

ELEVATE

1275 26th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 9 and 10, 2021
San Francisco, CA

Figure **2C**

DRAFTER: KP/MV/JB

DATE: 10/20/2021

CONTRACT NO.: 21-073A

ϕ = No VOCs detected w/ PPbRae

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1281 26th Ave
Site/Facility Name:	Residential
Screening Event Date:	3/2/22
Screening Event Time:	~~[illegible]~~ 1000
Event Weather Conditions:	Mostly Cloudy, 50°F
Name of Person(s) Conducting Sampling:	B. Angulo, E. Male
Company Conducting Sampling:	RMD Environmental Solutions
Field Instrument Type[1] (List All):	ppb RAE 3000
Instrument Calibration Date:	3/1/22

1 - Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

Indoor Air Source Screen Form

UPPER FLOOR

GROUND FLOOR

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- Living Area	- Breathing Zone (BZ)		∅	PPB	
- Dining Room	- BZ		∅		
- Kitchen	- BZ		∅		
- Bath #1	- BZ		∅		
- Bed #1	- BZ		∅		
- Bed #2	- BZ		∅		
- Sun Room	- BZ		∅		
- Garage	- BZ		∅		Caulking, Car Fuel injection fluids
- Laundry Area	- BZ / Utility Sink		∅		WD-40, Cleansers
- Bath #2	- BZ / Sink		∅		
- Bed #3	- BZ		∅		
- Living Area	- BZ		∅		
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
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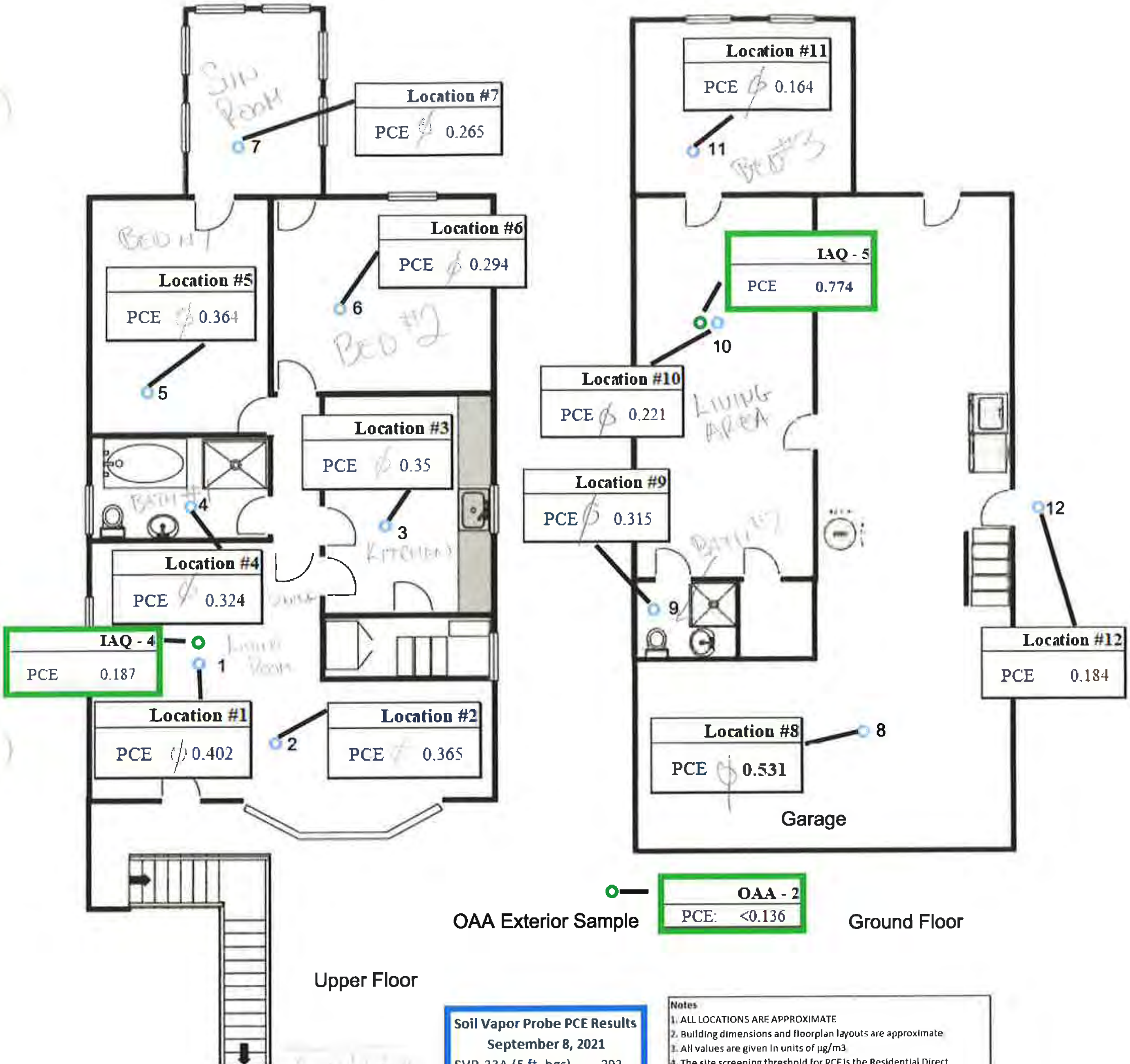
-	-				
-	-				
-	-				

Comments:
Central Heating not in operation



LEGEND

- HAPSITE Sampling Location
- AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
September 8, 2021	
SVP-33A (5 ft. bgs)	293
SVP-33B (15 ft. bgs)	528
March 3, 2021	
SVP-33A (5 ft. bgs)	260
SVP-33B (15 ft. bgs)	640
September 3, 2020	
SVP-33A (5 ft. bgs)	270
SVP-33B (15 ft. bgs)	620
SVP-33B (15 ft. bgs) duplicate	550

Notes

1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate
3. All values are given in units of µg/m3
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 µg/m3.
5. A bold result indicates an exceedance of the screening level for PCE.
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house.
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions

bgs: below ground surface
ft: feet
PCE: tetrachloroethene
µg/m3: micrograms per cubic meter

ELEVATE ENVIRONMENTAL CONSULTING

1281 26th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 7 and 8, 2021
San Francisco, CA

Figure **2B**

DRAFTER: KP/MV/JB

DATE: 10/20/2021

CONTRACT NO.: 21-073A

ϕ = no VOCs detected w/ PPbRae

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1276 27th Ave
Site/Facility Name:	Residential
Screening Event Date:	3/2/22
Screening Event Time:	1205
Event Weather Conditions:	Mostly Cloudy, 50 °F
Name of Person(s) Conducting Sampling:	B. Angulo, E. Male
Company Conducting Sampling:	RMD Environmenta Solutions
Field Instrument Type[1] (List All):	ppb Rae 3000
Instrument Calibration Date:	3/1/22

1 - Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

[illegible] Ave

Indoor Air Source Screen Form

UPPER FLOOR | GROUND FLOOR

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- LIVING ROOM	- BREATHING ZONE (BZ)		Ø	PPB	
- DINING ROOM	- BZ		Ø		
- "	- [illegible]		Ø		
- BATH #1	- BZ | SINK/SHOWER		Ø		
- BED #1	- BZ		Ø		
- BED #2	- BZ		Ø		
- BED #3	- BZ		Ø		
- DINING AREA	- BZ		Ø		PAINT, CLEANERS
- GARAGE	- BZ		Ø		
- BATH #2	- BZ		Ø		
- "	- SINK		Ø		
- "	- SHOWER		Ø		
- BED #7	- BZ		Ø		
-	-				
-	-				
-	-				
-	-				
-	-				
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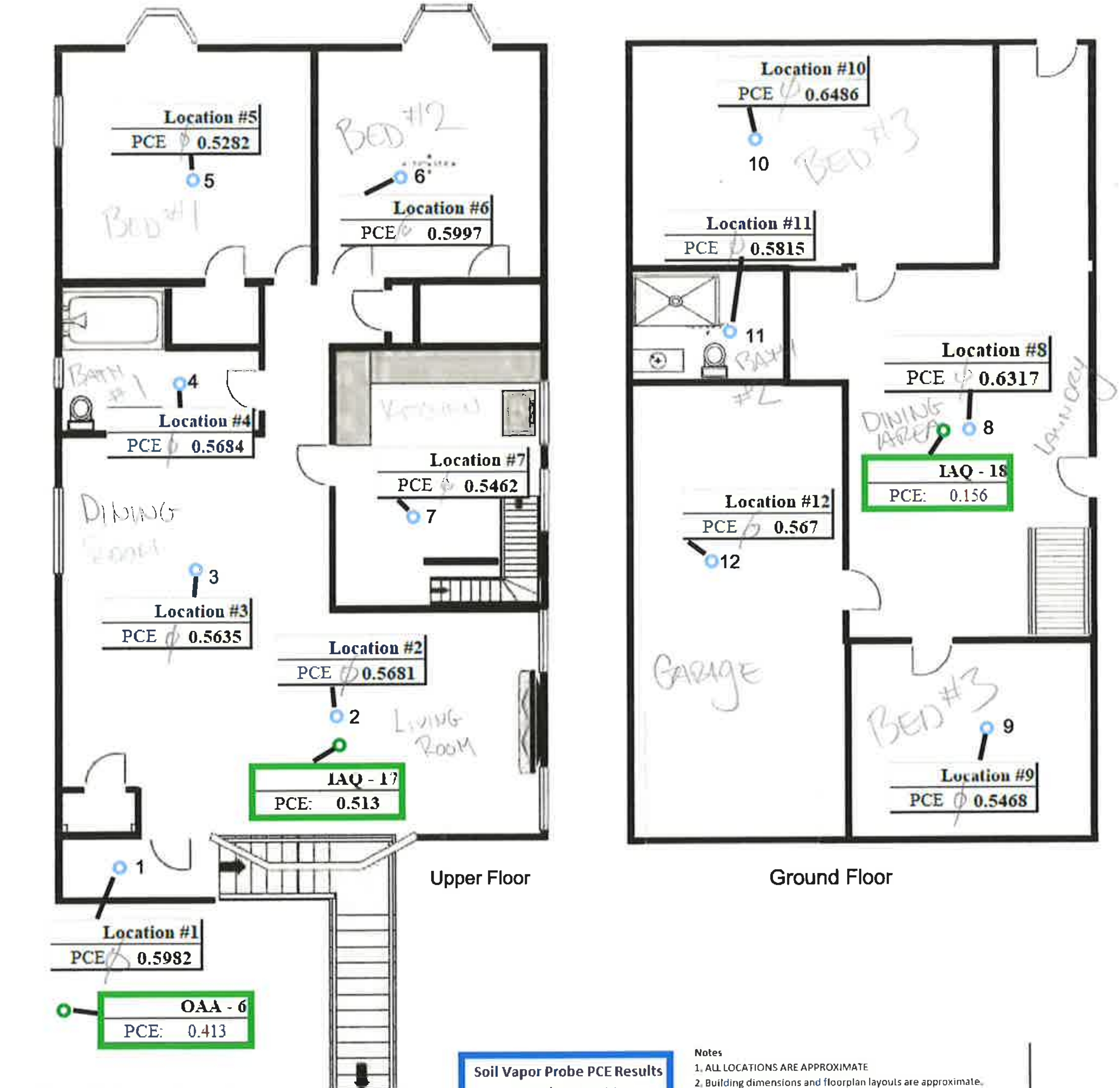
-	-				
-	-				

Comments:

HEAT SET TO 67°



OAA Exterior Sample

LEGEND

- HAPSITE Sampling Location
- AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
October 1, 2021	
SVP-28A (5 ft. bgs)	115
SVP-28B (15 ft. bgs)	171
September 10, 2021	
SVP-28A (5 ft. bgs)	109
SVP-28B (15 ft. bgs)	217
March 2, 2021	
SVP-28A (5 ft. bgs)	94
SVP-28B (15 ft. bgs)	290
September 2, 2020	
SVP-28A (5 ft. bgs)	120
SVP-28B (15 ft. bgs)	6.4

Notes

1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate.
3. All values are given in units of µg/m3.
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 µg/m3.
5. A bold result indicates an exceedance of the screening level for PCE.
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house.
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions

bgs: below ground surface
ft: feet
PCE: tetrachloroethene
µg/m3: micrograms per cubic meter

ELEVATE ENVIRONMENTAL CONSULTING, INC.

127627Th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 30 and October 1, 2021
San Francisco, CA

Figure **2F**

DRAFTER: KP/JB

DATE: 10/20/2021

CONTRACT NO.: 21-073A

∅ = NO VOCS DETECTED W/ PPbRae

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1280 27th AVE
Site/Facility Name:	RESIDENTIAL
Screening Event Date:	3/2/22
Screening Event Time:	12:26
Event Weather Conditions:	MOSTLY CLOUDY, 50°F
Name of Person(s) Conducting Sampling:	B. ANGUIANO, E. Male
Company Conducting Sampling:	RHO ENVIRONMENTAL SOLUTIONS
Field Instrument Type[1] (List All):	ppbRAE 3000
Instrument Calibration Date:	3/1/22

1 - Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- LIVING ROOM	- BREATHING ZONE		Ø	PPB	
- DINING ROOM	- BZ		Ø		
- KITCHEN	- BZ		Ø		
- BATHROOM #1	- BZ/SINK/SHOWER		Ø		
- BED#1	- BZ		Ø		
- BED#2	- BZ		Ø		
- KITCHEN	- UNDER SINK		Ø		
- LIVING ROOM	- BZ		Ø		
- GARAGE	- BZ		Ø		MINERAL SPIRITS, CLEANSERS
- "	- UNDER UTILITY SINK		Ø		OLD PAINT CANS
- BATH #2	- BZ/SINK/DRAIN		Ø		
- BED #3	- BZ		Ø		
- BED #4	- BZ		Ø		
- BATH #3	- BZ/SINK		Ø		NAIL POLISH REMOVER
-	-				
-	-				
-	-				
-	-				
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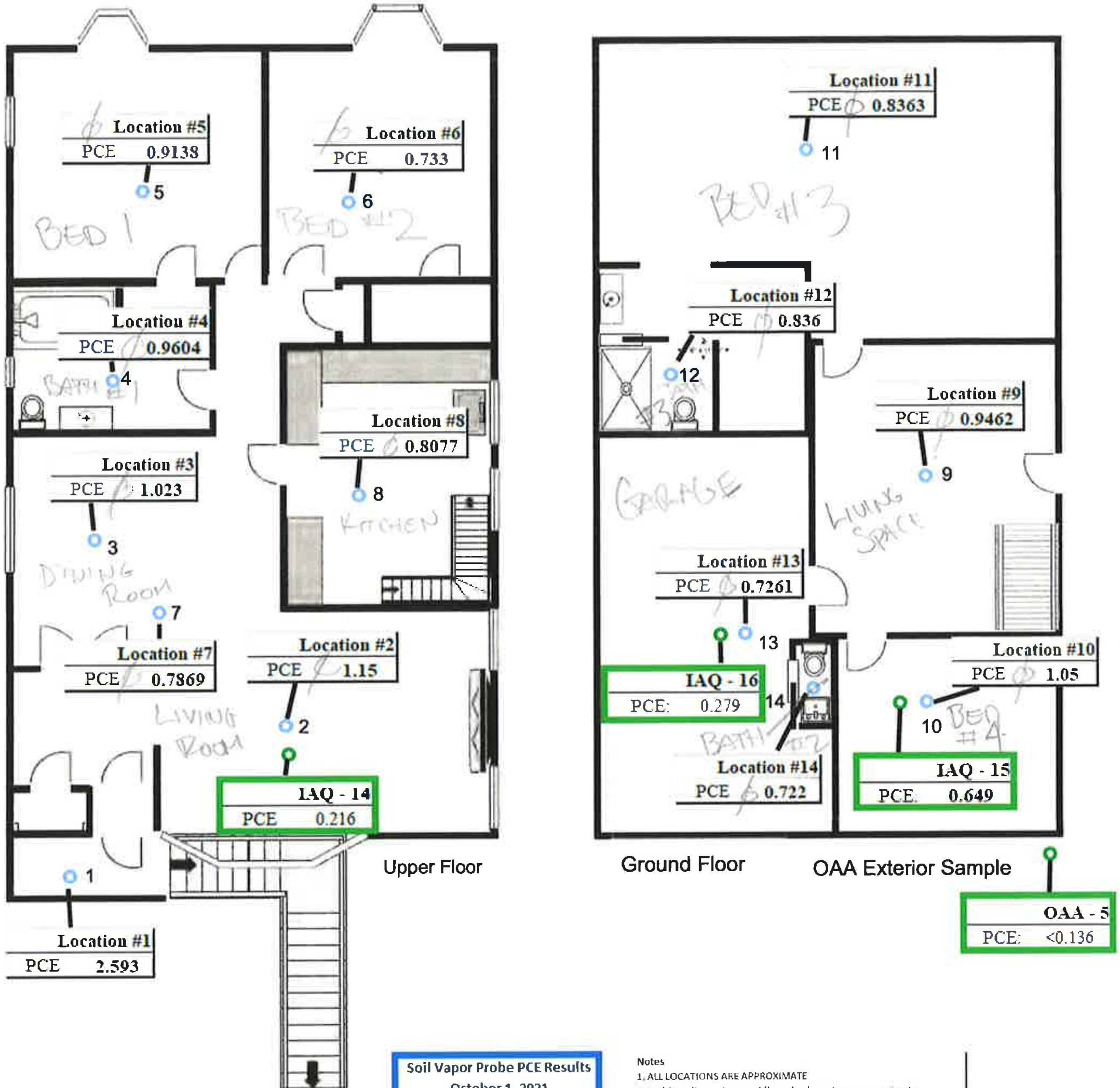
-	-				

Comments:

[illegible]



LEGEND

- HAPSITE Sampling Location
- AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
October 1, 2021	
SVP-29A (5 ft. bgs)	48.1
SVP-29B (15 ft. bgs)	0.588
September 15, 2021	
SVP-29A (5 ft. bgs)	65.2
SVP-29B (15 ft. bgs)	194
March 2, 2021	
SVP-29A (5 ft. bgs)	70
SVP-29B (15 ft. bgs)	280
September 2, 2020	
SVP-29A (5 ft. bgs)	73
SVP-29B (15 ft. bgs)	190

Notes
1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate.
3. All values are given in units of μg/m3.
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 μg/m3.
5. A bold result indicates an exceedance of the screening level for PCE.
6. The ESL screening levels are based on long term concentrations so Instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house.
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions
bgs: below ground surface
ft: feet
PCE: tetrachloroethene
μg/m3: micrograms per cubic meter

ELEVATE ENVIRONMENTAL CONSULTANTS INC

1280 27Th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 30 and October 1, 2021
San Francisco, CA

Figure
2E

DRAFTER: KP/JB
DATE: 10/20/2021
CONTRACT NO.: 21-073A

ϕ = no VOCs DETECTED w/ ppbRae

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1284 27th Ave
Site/Facility Name:	Residential
Screening Event Date:	3/2/22
Screening Event Time:	0915
Event Weather Conditions:	Mostly cloudy, 50°F
Name of Person(s) Conducting Sampling:	B. Angulo, E. Male
Company Conducting Sampling:	RMD Environmental Solutions
Field Instrument Type[1] (List All):	ppb Rae 3000
Instrument Calibration Date:	3/1/22

1 - Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

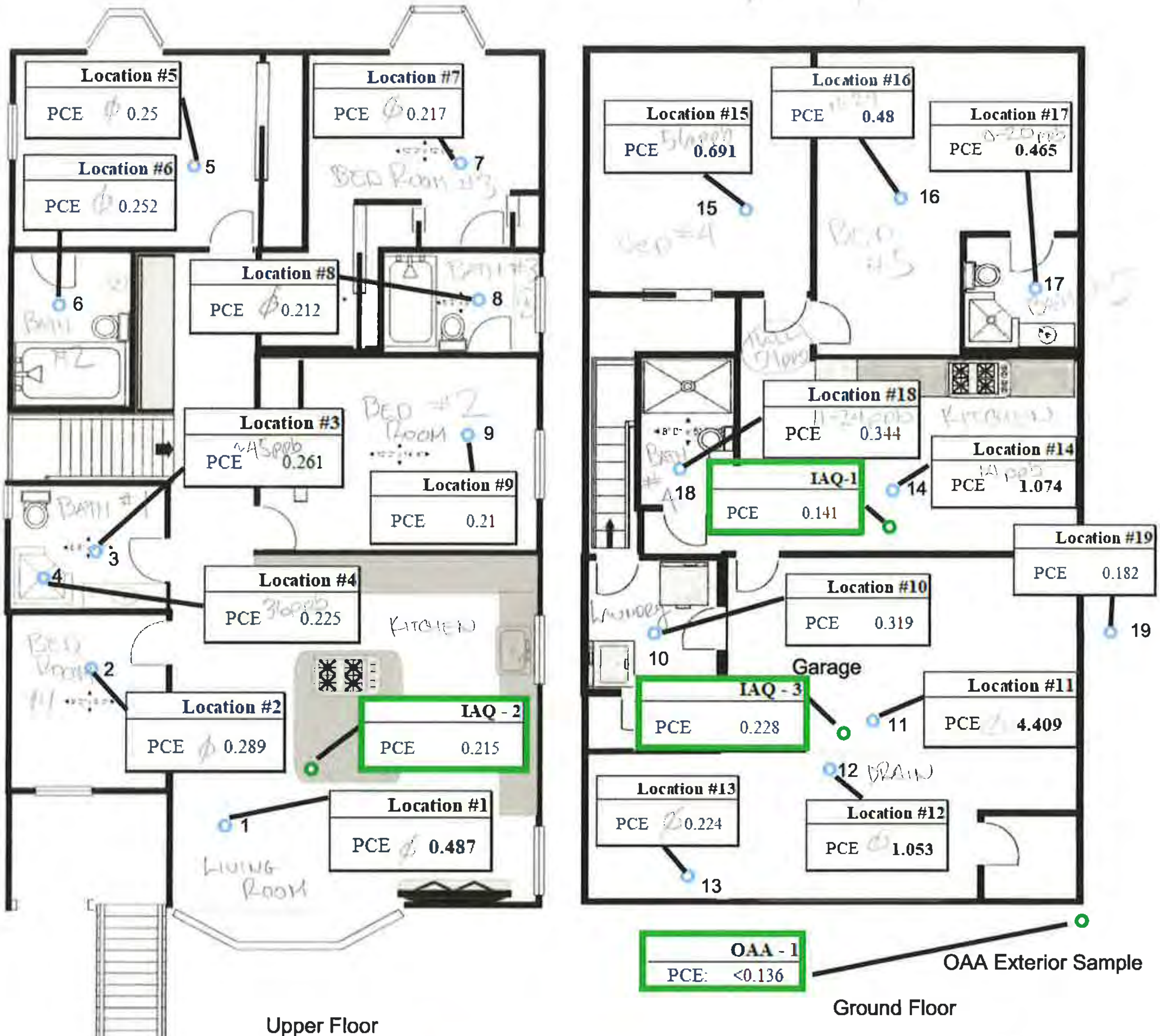
[illegible] 29th AVE

[illegible]

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- LIVING ROOM	- BREATHING ZONE/BZ		0	PPB	
- KITCHEN	- BZ		Ø		
- BED ROOM #1	- BZ		Ø		
- BED ROOM #2	- BZ		Ø		BATHROOM CLEANERS
- BED ROOM #3	- BZ		Ø		
- BATH #2	- BZ / SINK/SHOWER		Ø		
- BATH #3	- BZ / SINK/SHOWER		Ø		
- BATH #1	- DRAIN		45-85		
-	- SHOWER		36		
-	- BREATHING ZONE		~45		
- LAUNDRY ROOM	- BZ		Ø		
-	- NEAR DETERGENTS		Ø		
- GARAGE	- BZ		Ø		Fuel injection fluid
-	- DRAIN		Ø		Ammonia Cleaners, Lysol spray
- [illegible]	- NEAR CLEANERS		119		PROPANE TORCH, fuel injection
- STORAGE AREA	- NEAR CLEANERS		36		Cleaning Supplies, WD-40
- NEXT TO KITCHEN	-				Oven cleaner, CAULKING
- BATH #4	- BZ (AFTER REMOVE PRODUCTS)		11-24		PAINTED RECENTLY
- KITCHEN	- BZ		14		
- BEDROOM #4	- BZ		54-56		PAINTS FOR CRAFTS
- HALL	- BZ		54		CRAFTS W/ PAINT [illegible]
- BED #5	- BZ		11-24		
- BATH #5	- BZ / SINK		0-30		
- BACKYARD	- OUTSIDE		Ø		
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				

Comments:
HEATING SET TO AUTO 67°



LEGEND

- HAPSITE Sampling Location
- AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
September 8, 2021	
SVP-30A (5 ft. bgs)	83.5
SVP-30B (15 ft. bgs)	248
March 2, 2021	
SVP-30A (5 ft. bgs)	160
SVP-30B (15 ft. bgs)	350
September 2, 2020	
SVP-30A (5 ft. bgs)	120
SVP-30B (15 ft. bgs)	12

Notes
1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate.
3. All values are given in units of µg/m3.
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 µg/m3.
5. A bold result indicates an exceedance of the screening level for PCE.
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house.
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions
bgs: below ground surface
ft: feet
PCE: tetrachloroethene
µg/m3: micrograms per cubic meter

ELEVATE ENVIRONMENTAL CONSULTANTS INC

1284 27th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 7 and 8, 2021
San Francisco, CA

Figure **2A**

DRAFTER: KP/MV/JB | DATE: 10/20/2021 | CONTRACT NO.: 21-073A

ϕ = No VOCs DETECTED w/ ppbRae

Building Survey Form

Type in or select answers from drop-down lists in the righthand column.
Upload answers to GeoTracker database for criteria marked with an asterisks (*).
See Table 1 in the *Guidance on Uploading Vapor Intrusion Information into GeoTracker* (Attachment 4 of Supplemental Vapor Intrusion Guidance) for a description of Building Design Type input choices.

Person Conducting Survey	Input
Name:	Eric Theil
Company:	RMD E.S.
Phone Number:	650 450 6639
Email:	etheil@rmdes.net

Building Contact Information	Input
Name:	Leyla Alieva and Shane Hill
Contact Title:	- Occupant
Phone Number:	
Email:	alievaleila@gmail.com
Building Occupant Interviewed?	-

Building Information	Input
Date of Building Survey (dd/mm/yy):	1/31/23
*Building Name:	Residential
*Building Address (Street, City):	1271 26th Ave. SF, CA, 94122
Coordinates for Center of Building (Latitude, Longitude; decimal degrees to 0.00000):	37.76170° N, 122.46334° W
*Building Location Onsite/Offsite with respect to Site/Facility:	- Offsite
*Year Built (yyyy; approximate if unsure):	1924
*Building Occupants:	- 6

Building Survey Form

Building Dimensions	Input
*Building Footprint Area (within enclosed space; square feet [Ft2]):	~1250
Building Dimensions (at grade; feet by feet):	~
*Ceiling Height of Ground Floor (Feet):	~ 9'
*Number of Floors (excluding the basement):	2

Building Design	Input
*Building Design Type:	- Single Unit residential
Has the design been modified?	- Ø
*Foundation Type:	- Slab
*Building Vapor Intrusion Mitigation System:	- Ø
*Heating, Ventilation, & Air Conditioning (HVAC) System:	- Heating Only
Type of Energy Used in Building?	- Gas (Water Heater, Furnace, Cooking) + Electricity
Energy Primarily Used For?	- Space Heating
Number of Units for Multi-Unit Buildings:	1
Number of Rooms (average per unit for multi-unit buildings):	17
Number of Exterior Doors:	4 + garage door
Number of Elevators:	Ø
Number of Active Exhaust Fans (e.g., kitchen/bathroom):	6
Chimney or Other Vertical Draft Source?	- 1 (don't use)

Building Slab	Input
Slab Thickness (inches; approximate if unsure):	~~3~~ 6"
Large Slab Penetrations (> 1 Foot Diameter):	- Floor Drain Garage (<1')
Soil Type 0 to 3 Feet Below Building:	- Sandy?
Evidence of moisture intrusion from Below Slab?	- NO

Building Survey Form

Building Windows	Input
Number of Windows:	10
Weather Sealed Windows and Exterior Doors?	- yes, Partially.
Average Area of Window Open to Outside Air (Feet2):	
Ventilation During Sampling:	- no

Building Crawl Space	Input
Crawl Space Height (Feet):	0
Number Crawl Space Vents:	
Average Area per Crawl Space Vent (Feet2):	
Evidence of moisture intrusion into Crawl Space from Soil?	-

Building Basement	Input
Basement Height (Feet):	0
Basement Footprint Area (Feet2):	
Basement Wall Area Below Ground Surface (Feet2):	
Exposed Basement above grade?	-
Vents or Windows above-grade in exposed basement?	-
Unfinished Basement?	-
Evidence of moisture intrusion into Basement from Soil?	-

Building Survey Form

Factors Potentially Influencing Indoor Air Quality	Input
Is there an attached garage?	- yes
Is there smoking in the building?	- Ø
Is there new carpet or furniture?	- new bed, mattress in bedroom (1 mo. ago)
Have clothes or drapes been recently dry cleaned?	- no
Has painting or staining been done within the last six months?	- 1 bedroom repainted (1.5 mo. ago)
Has the building been recently remodeled?	- no
Has the building ever had a fire?	- no
Is there a hobby or craft area in the building?	- oil painting in garage (thinners moved last week)
Are cleaning solvents stored in the building (e.g., spot cleaner, gun cleaner?	(laundry cleaner) - yes, but moved last week
Is there a fuel oil tank on the property?	- Ø
Is there a septic tank on the property?	- Ø
Has the building been fumigated or sprayed for pests recently?	- Ø
Historically the building was primarily used for?	- residential
Do current building occupants use solvents at another location (e.g., work, hobby)?	- Ø

Meteorological Conditions	Input
Weather:	Sunny
Outdoor Temperature - High (°F):	57
Outdoor Temperature - Low (°F):	37
Indoor Temperature (°F):	68
Barometric Pressure Reading (mmHg):	30.18
Wind Direction:	- NE-SW
Average Wind Speed (mph):	6
HVAC Setting for Current Season:	- Heat

(End of Form)

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1271 26th Ave, San Francisco, CA
Site/Facility Name:	Police Credit Union
Screening Event Date:	01/31/23
Screening Event Time:	1400
Event Weather Conditions:	Sunny
Name of Person(s) Conducting Sampling:	E. Theil S. Thornton
Company Conducting Sampling:	RMD ES
Field Instrument Type[1] (List All):	PPBRae
Instrument Calibration Date:	

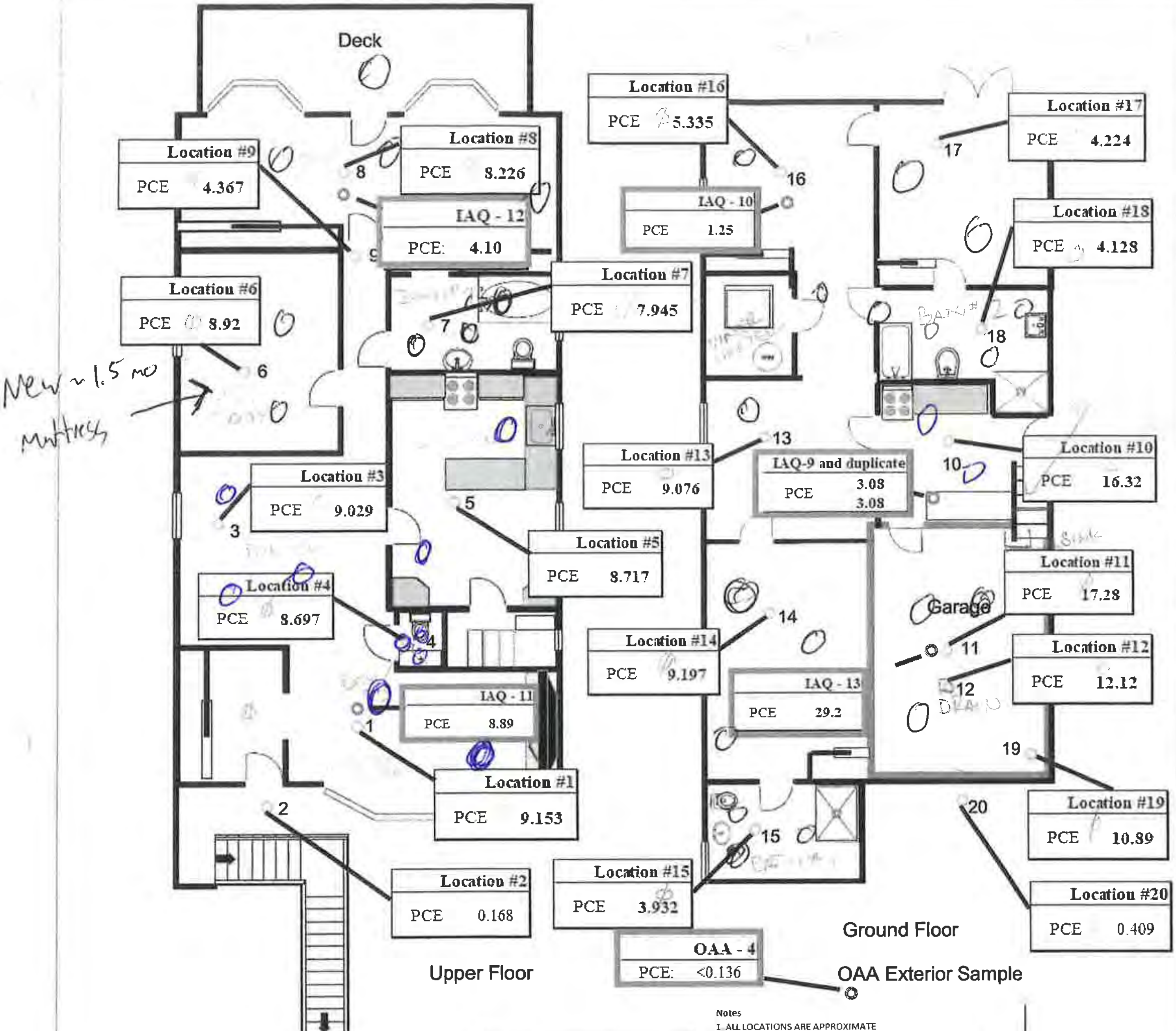
1 - Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- Upper Livingroom	- BZ.			0	
- Dining	-			0	
- Bedroom (S)	-			0	
- new room (W)	-			0	
- Bathroom	-			0	
-	- sink			0	
-	- toilet			0	
-	- shower drain			0	
- kitchen	- BZ.			0	
-	- sink			0	
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
Ground.	- BZ			0	
- Bath (E)	-			0	
-	- toilet			0	
-	- sink			0	
-	- shower drain			0	
- Garage	- BZ			0	
- Bedroom (SE)	-			0	
- kitchen	-			0	
-	- sink			0	
- Bed (SW)	- BZ			0	
- Bed (NW)	- BZ			0	
- Bath (central)	- BZ			0	
-	- toilet			0	
-	- sink			0	
-	- shower drain			0	

Comments: Acetone moved outside already.

Occupant told alcohol products + aerosols outside. Keep car out of garage



LEGEND

- HAPSITE Sampling Location
- AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
September 15, 2021	
SVP-31A (5 ft. bgs)	146
SVP-31B (15 ft. bgs)	282
March 3, 2021	
SVP-31A (5 ft. bgs)	130
SVP-31B (15 ft. bgs)	310
September 3, 2020	
SVP-31A (5 ft. bgs)	150
SVP-31B (15 ft. bgs)	290

Notes

1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate.
3. All values are given in units of µg/m3.
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 µg/m3.
5. A bold result indicates an exceedance of the screening level for PCE
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions

bgs: below ground surface
ft: feet
PCE: tetrachloroethene
µg/m3: micrograms per cubic meter

ELEVATE

1271 26th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 14 and 15, 2021
San Francisco, CA

Figure **2D**

DRAFTER: KP/MV/JB

DATE: 10/20/2021

CONTRACT NO.: 21-073A

ϕ = No VOCs detected

~~MARCH 2022~~
JAN 31, 2023

Building Survey Form

Type in or select answers from drop-down lists in the righthand column.
Upload answers to GeoTracker database for criteria marked with an asterisks (*).
See Table 1 in the *Guidance on Uploading Vapor Intrusion Information into GeoTracker* (Attachment 4 of Supplemental Vapor Intrusion Guidance) for a description of Building Design Type input choices.

Person Conducting Survey	Input
Name:	Eric Theil
Company:	RMD ES
Phone Number:	650-450-6639
Email:	etheil@rmdes.net

Building Contact Information	Input
Name:	Newman Leung
Contact Title:	- Occupant
Phone Number:	
Email:	Newman_Leung@hotmail.com
Building Occupant Interviewed?	- Yes

Building Information	Input
Date of Building Survey (dd/mm/yy):	1/3/123
*Building Name:	Residential
*Building Address (Street, City):	1280 27th Ave. SF, CA
Coordinates for Center of Building (Latitude, Longitude; decimal degrees to 0.00000):	37.76360°N, 122.48548°W
*Building Location Onsite/Offsite with respect to Site/Facility:	- Offsite
*Year Built (yyyy; approximate if unsure):	~1924
*Building Occupants:	- 4

Building Survey Form

Building Dimensions	Input
*Building Footprint Area (within enclosed space; square feet [Ft2]):	~ 1200
Building Dimensions (at grade; feet by feet):	~ 28 x 44
*Ceiling Height of Ground Floor (Feet):	~ 8ft
*Number of Floors (excluding the basement):	2

Building Design	Input
*Building Design Type:	- Single unit residental
Has the design been modified?	- 2016 remodel
*Foundation Type:	- slab
*Building Vapor Intrusion Mitigation System:	- 0
*Heating, Ventilation, & Air Conditioning (HVAC) System:	- heating only
Type of Energy Used in Building?	- gas - dryer, cooking, HVAC, Water heater + electricity
Energy Primarily Used For?	- Cooking, Heating, Laundry
Number of Units for Multi-Unit Buildings:	1
Number of Rooms (average per unit for multi-unit buildings):	10
Number of Exterior Doors:	3 + garage door
Number of Elevators:	0
Number of Active Exhaust Fans (e.g., kitchen/bathroom):	4
Chimney or Other Vertical Draft Source?	- 1

Building Slab	Input
Slab Thickness (inches; approximate if unsure):	~ 3-6 inches?
Large Slab Penetrations (> 1 Foot Diameter):	- NO
Soil Type 0 to 3 Feet Below Building:	- Sandy ?
Evidence of moisture intrusion from Below Slab?	- NO

Building Survey Form

Building Windows	Input
Number of Windows:	10
Weather Sealed Windows and Exterior Doors?	- ~~0~~
Average Area of Window Open to Outside Air (Feet2):	~10 ft2
Ventilation During Sampling:	- No

Building Crawl Space	Input
Crawl Space Height (Feet):	~~0~~
Number Crawl Space Vents:	
Average Area per Crawl Space Vent (Feet2):	
Evidence of moisture intrusion into Crawl Space from Soil?	-

Building Basement	Input
Basement Height (Feet):	~~0~~
Basement Footprint Area (Feet2):	
Basement Wall Area Below Ground Surface (Feet2):	
Exposed Basement above grade?	-
Vents or Windows above-grade in exposed basement?	-
Unfinished Basement?	-
Evidence of moisture intrusion into Basement from Soil?	-

Building Survey Form

Factors Potentially Influencing Indoor Air Quality	Input
Is there an attached garage?	- yes
Is there smoking in the building?	- ~~0~~
Is there new carpet or furniture?	- ~~0~~
Have clothes or drapes been recently dry cleaned?	- ~~0~~
Has painting or staining been done within the last six months?	- ~~0~~
Has the building been recently remodeled?	- 2016 remodel (downstairs only)
Has the building ever had a fire?	- ~~0~~
Is there a hobby or craft area in the building?	- ~~0~~
Are cleaning solvents stored in the building (e.g., spot cleaner, gun cleaner?	- perhaps in garage?
Is there a fuel oil tank on the property?	- ~~0~~
Is there a septic tank on the property?	- ~~0~~
Has the building been fumigated or sprayed for pests recently?	- ~~0~~
Historically the building was primarily used for?	- Residential
Do current building occupants use solvents at another location (e.g., work, hobby)?	- ~~0~~

Meteorological Conditions	Input
Weather:	Sunny
Outdoor Temperature - High (°F):	57
Outdoor Temperature - Low (°F):	37
Indoor Temperature (°F):	67
Barometric Pressure Reading (mmHg):	30.18
Wind Direction:	- NE - SW
Average Wind Speed (mph):	6 mph
HVAC Setting for Current Season:	- Heat

(End of Form)

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1280 27th Ave
Site/Facility Name:	Police Credit Union
Screening Event Date:	01/31/23
Screening Event Time:	1200
Event Weather Conditions:	Sunny
Name of Person(s) Conducting Sampling:	E. Neil B. Englert
Company Conducting Sampling:	RMD ES
Field Instrument Type[1] (List All):	PPB Rae
Instrument Calibration Date:	

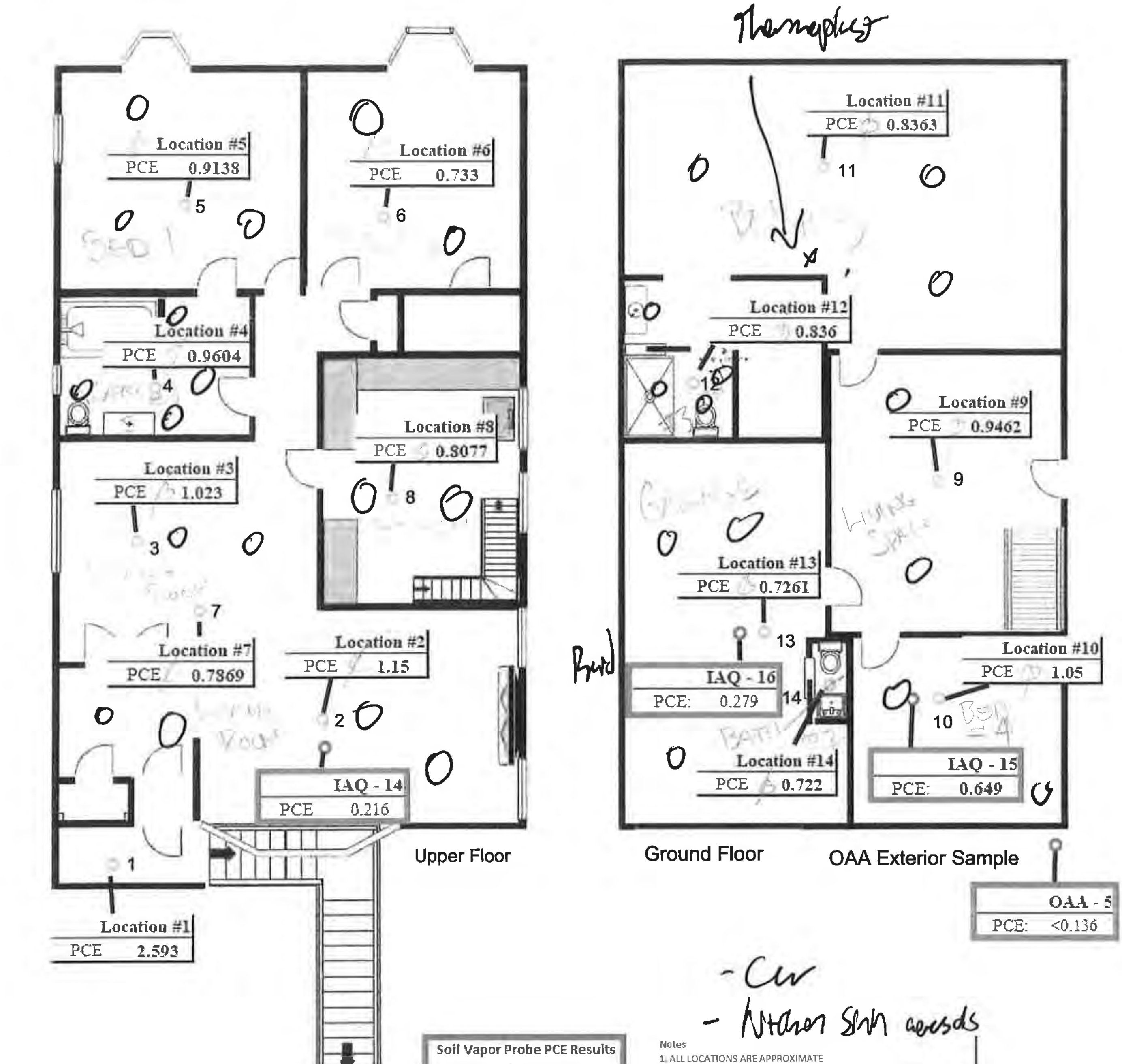
[1] - Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
Upper Bed 1	- Breathing Zone	0	0	PPB	
- Bed 2	- "		0		
- Bathroom	- B.Z.		0		
-	- Sink		0		
-	- toilet		0		
-	- Shower drain		0		
- Kitchen	- BZ		0		
-	- sink		0		Aerosols - [illegible]
- Living Room	- BZ		0		
- Dining Room	- BZ		0		
-	-				
Ground - Garage	-		0		
-	-				
- BED#3	- BZ		0		
- Bed #4	- "		0		
- Bathroom	- BZ		0		
-	- Sink		0		
-	- toilet		0		
-	- Shower drain		0		
-	-				
- Living space	- B.Z.		0		
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				

Comments:

Occupants asked to move alcohol based products and aerosols outside - and to move the car from the garage.



LEGEND

HAPSITE Sampling Location

AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
October 1, 2021	
SVP-29A (5 ft. bgs)	48.1
SVP-29B (15 ft. bgs)	0.588
September 15, 2021	
SVP-29A (5 ft. bgs)	65.2
SVP-29B (15 ft. bgs)	194
March 2, 2021	
SVP-29A (5 ft. bgs)	70
SVP-29B (15 ft. bgs)	280
September 2, 2020	
SVP-29A (5 ft. bgs)	73
SVP-29B (15 ft. bgs)	190

Notes

1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate
3. All values are given in units of μg/m3
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 μg/m3
5. A bold result indicates an exceedance of the screening level for PCE
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted

Definitions

bgs: below ground surface

ft: feet

PCE: tetrachloroethene

μg/m3: micrograms per cubic meter

ELEVATE

12802 7Th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 30 and October 1, 2021
San Francisco, CA

Figure **2E**

DRAFTER: KP/JB | DATE: 10/20/2021 | CONTRACT NO.: 21-073A

ø = no VOCs detected w/ ppbRae

1/31/2023

Building Survey Form

Type in or select answers from drop-down lists in the righthand column. Upload answers to GeoTracker database for criteria marked with an asterisks (*). See Table 1 in the *Guidance on Uploading Vapor Intrusion Information into GeoTracker* (Attachment 4 of Supplemental Vapor Intrusion Guidance) for a description of Building Design Type input choices.

Person Conducting Survey	Input
Name:	Eric Theil
Company:	RMD ES
Phone Number:	650 450 6639
Email:	etheil@rmdes.net

Building Contact Information	Input
Name:	Adam Michels
Contact Title:	- Occupant
Phone Number:	
Email:	adamgmichels@yahoo.com
Building Occupant Interviewed?	-

Building Information	Input
Date of Building Survey (dd/mm/yy):	1/31/23
*Building Name:	Residential
*Building Address (Street, City):	1275 26th Ave, SF, CA
Coordinates for Center of Building (Latitude, Longitude; decimal degrees to 0.00000):	37.763700°N, 122.48499°W
*Building Location Onsite/Offsite with respect to Site/Facility:	- Offsite
*Year Built (yyyy; approximate if unsure):	1928
*Building Occupants:	- ~~2~~ 4

Building Survey Form

Building Dimensions	Input
*Building Footprint Area (within enclosed space; square feet [Ft2]):	~1200
Building Dimensions (at grade; feet by feet):	? ~28' x ~41'
*Ceiling Height of Ground Floor (Feet):	9'
*Number of Floors (excluding the basement):	2

Building Design	Input
*Building Design Type:	- Single unit residential
Has the design been modified?	- No
*Foundation Type:	- Slab
*Building Vapor Intrusion Mitigation System:	- 0
*Heating, Ventilation, & Air Conditioning (HVAC) System:	- Heating (don't use), use Natural Gas Fireplace
Type of Energy Used in Building?	Water Heater, Fireplace + Stove (Gas) + Electricity
Energy Primarily Used For?	- Water-Heating, Laundry, Cooking
Number of Units for Multi-Unit Buildings:	1
Number of Rooms (average per unit for multi-unit buildings):	11
Number of Exterior Doors:	3 + Garage
Number of Elevators:	0
Number of Active Exhaust Fans (e.g., kitchen/bathroom):	2 1-kitchen 1-bathroom upstairs 1-downstairs bathroom (not used) broken ceiling
Chimney or Other Vertical Draft Source?	- 1

Building Slab	Input
Slab Thickness (inches; approximate if unsure):	~3-6 inches?,
Large Slab Penetrations (> 1 Foot Diameter):	- NO
Soil Type 0 to 3 Feet Below Building:	- Sandy?
Evidence of moisture intrusion from Below Slab?	- NO

Building Survey Form

Building Windows	Input
Number of Windows:	7
Weather Sealed Windows and Exterior Doors?	- 0
Average Area of Window Open to Outside Air (Feet2):	10 ft²
Ventilation During Sampling:	- No

Building Crawl Space	Input
Crawl Space Height (Feet):	0
Number Crawl Space Vents:	
Average Area per Crawl Space Vent (Feet2):	
Evidence of moisture intrusion into Crawl Space from Soil?	-

Building Basement	Input
Basement Height (Feet):	0
Basement Footprint Area (Feet2):	
Basement Wall Area Below Ground Surface (Feet2):	
Exposed Basement above grade?	-
Vents or Windows above-grade in exposed basement?	-
Unfinished Basement?	-
Evidence of moisture intrusion into Basement from Soil?	-

Building Survey Form

Factors Potentially Influencing Indoor Air Quality	Input
Is there an attached garage?	- yes
Is there smoking in the building?	- 0
Is there new carpet or furniture?	- 0
Have clothes or drapes been recently dry cleaned?	- 0
Has painting or staining been done within the last six months?	- 0
Has the building been recently remodeled?	- 0
Has the building ever had a fire?	- 0
Is there a hobby or craft area in the building?	- 0
Are cleaning solvents stored in the building (e.g., spot cleaner, gun cleaner?	- 0
Is there a fuel oil tank on the property?	- 0 BBQ in backyard
Is there a septic tank on the property?	- 0
Has the building been fumigated or sprayed for pests recently?	- 0
Historically the building was primarily used for?	- Residential
Do current building occupants use solvents at another location (e.g., work, hobby)?	- 0

Meteorological Conditions	Input
Weather:	Sunny
Outdoor Temperature - High (°F):	57°
Outdoor Temperature - Low (°F):	37
Indoor Temperature (°F):	68
Barometric Pressure Reading (mmHg):	30.18
Wind Direction:	- NE - SW
Average Wind Speed (mph):	6
HVAC Setting for Current Season:	- Heat

(End of Form)

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1275 26th Ave, San Francisco, CA
Site/Facility Name:	Police Credit Union
Screening Event Date:	01/31/23
Screening Event Time:	1100
Event Weather Conditions:	Sunny
Name of Person(s) Conducting Sampling:	E. Theil B. Englert
Company Conducting Sampling:	RMD ES
Field Instrument Type[1] (List All):	PPB Rae
Instrument Calibration Date:	

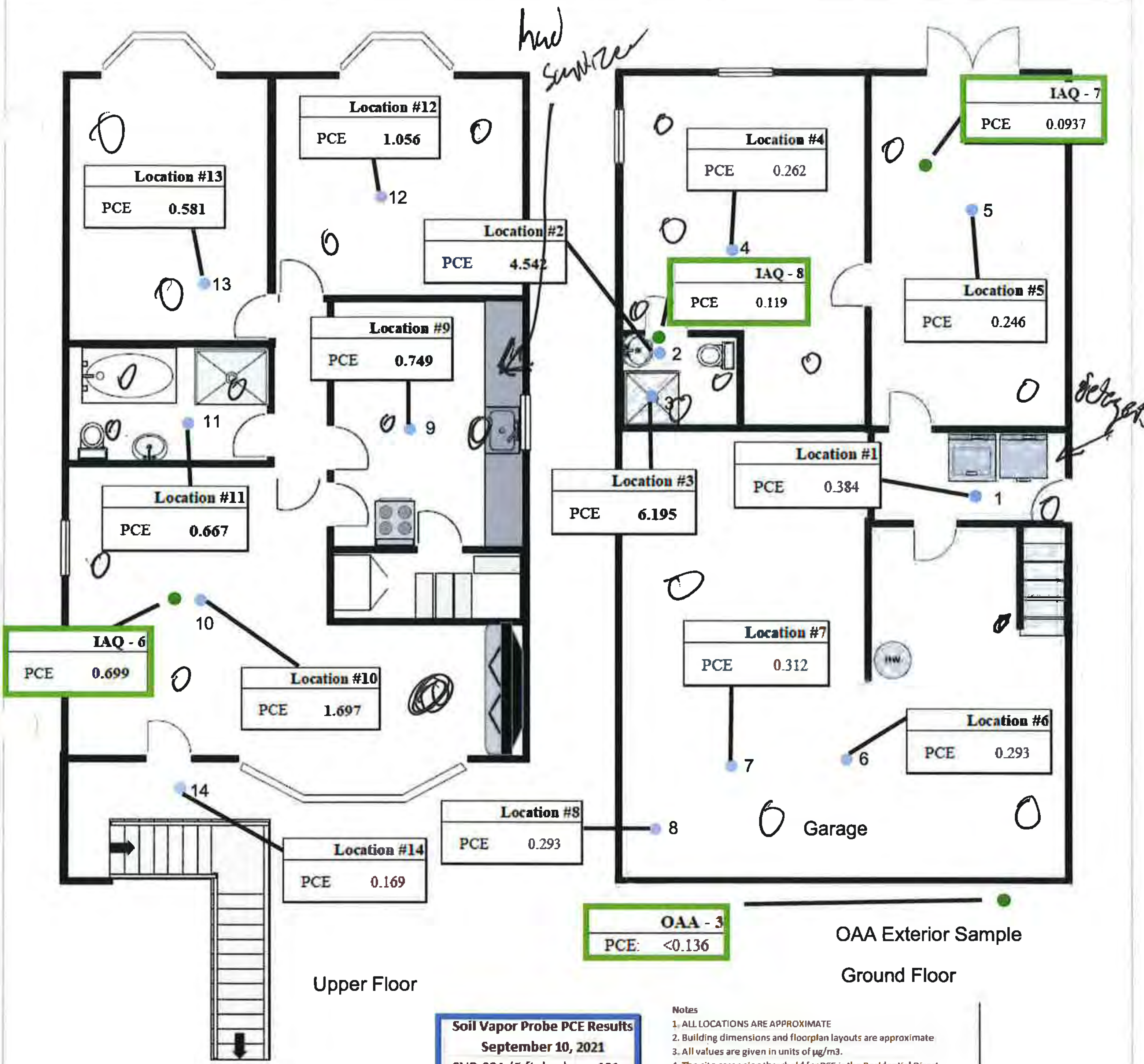
[1]- Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- Upper Bed (NW)	- B.Z.			0 ppb	
- Bed (SW)	-			0	
- Bathroom	-			0	
- ~~Kitchen~~	- Sink			0	
-	- toilet			0	
-	- Shower drain			0	
- Kitchen	- BZ			0	
- Sink drain	- Sink drain			0	
- Dining area	- BZ			0	
- Living area	- BZ			0	
-	-				
- Ground - Garage	- BZ			0	
- Bed (NW)	-			0	
- Bed (SW)	-			0	
- Bathroom	- BZ			0	
- ~~[illegible]~~	- Sink			0	
-	- Shower drain			0	
-	- toilet			0	
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				

Comments:

Asked occupant to move hand sanitizer outside and not park in garage.



LEGEND

- HAPSITE Sampling Location
- AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
September 10, 2021	
SVP-32A (5 ft. bgs)	121
SVP-32B (15 ft. bgs)	215
SVP-32B (15 ft. bgs) duplicate	208
March 3, 2021	
SVP-32A (5 ft. bgs)	91
SVP-32B (15 ft. bgs)	380
September 3, 2020	
SVP-32A (5 ft. bgs)	59
SVP-32B (15 ft. bgs)	200

Notes

1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate
3. All values are given in units of µg/m3.
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for Indoor air from the 2019 SF RWQCB ESLs of 0.46 µg/m3.
5. A bold result indicates an exceedance of the screening level for PCE.
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house.
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions

bgs: below ground surface
ft: feet
PCE: tetrachloroethene
µg/m3: micrograms per cubic meter

ELEVATE

1275 26th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 9 and 10, 2021
San Francisco, CA

Figure **2C**

DRAFTER: KP/MV/JB | DATE: 10/20/2021 | 1/31/2023 | CONTRACT NO.: 21-073A

Building Survey Form

Type in or select answers from drop-down lists in the righthand column.
Upload answers to GeoTracker database for criteria marked with an asterisks (*).
See Table 1 in the *Guidance on Uploading Vapor Intrusion Information into GeoTracker* (Attachment 4 of Supplemental Vapor Intrusion Guidance) for a description of Building Design Type input choices.

Person Conducting Survey	Input
Name:	Eric Theil
Company:	RMD ES
Phone Number:	650-450-6639
Email:	etheil@rmdes.net

Building Contact Information	Input
Name:	Armando and Helen Ribeiro
Contact Title:	- Occupant
Phone Number:	
Email:	hekadino@netzero.com
Building Occupant Interviewed?	- Yes

Building Information	Input
Date of Building Survey (dd/mm/yy):	1/3/123
*Building Name:	Residential
*Building Address (Street, City):	1281 26th Ave, SF, CA
Coordinates for Center of Building (Latitude, Longitude; decimal degrees to 0.00000):	37.76364°N, 122.48492°W
*Building Location Onsite/Offsite with respect to Site/Facility:	- offsite
*Year Built (yyyy; approximate if unsure):	
*Building Occupants:	- 2

Building Survey Form

Building Dimensions	Input
*Building Footprint Area (within enclosed space; square feet [Ft2]):	~~Single~~ ~1250
Building Dimensions (at grade; feet by feet):	~48 x 27
*Ceiling Height of Ground Floor (Feet):	9
*Number of Floors (excluding the basement):	2

Building Design	Input
*Building Design Type:	- Single unit residential
Has the design been modified?	- Not for last 10-15 yrs Downstairs built 15 yrs ago
*Foundation Type:	- Slab-on-grade
*Building Vapor Intrusion Mitigation System:	- None
*Heating, Ventilation, & Air Conditioning (HVAC) System:	- Heating Only (Central Heating)
Type of Energy Used in Building?	- Electricity + Natural Gas (Heater + Cooking)
Energy Primarily Used For?	- Water Heating, Cooking, Drying Laundry
Number of Units for Multi-Unit Buildings:	1 unit
Number of Rooms (average per unit for multi-unit buildings):	11
Number of Exterior Doors:	4
Number of Elevators:	No
Number of Active Exhaust Fans (e.g., kitchen/bathroom):	1 (kitchen)
Chimney or Other Vertical Draft Source?	- Chimney (1)

Building Slab	Input
Slab Thickness (inches; approximate if unsure):	~3-6"
Large Slab Penetrations (> 1 Foot Diameter):	- NO
Soil Type 0 to 3 Feet Below Building:	- Sandy?
Evidence of moisture intrusion from Below Slab?	- NO

Building Survey Form

Building Windows	Input
Number of Windows:	19
Weather Sealed Windows and Exterior Doors?	- No
Average Area of Window Open to Outside Air (Feet2):	0
Ventilation During Sampling:	- No

Building Crawl Space	Input
Crawl Space Height (Feet):	0
Number Crawl Space Vents:	
Average Area per Crawl Space Vent (Feet2):	
Evidence of moisture intrusion into Crawl Space from Soil?	-

Building Basement	Input
Basement Height (Feet):	0
Basement Footprint Area (Feet2):	
Basement Wall Area Below Ground Surface (Feet2):	
Exposed Basement above grade?	-
Vents or Windows above-grade in exposed basement?	-
Unfinished Basement?	-
Evidence of moisture intrusion into Basement from Soil?	-

Building Survey Form

Factors Potentially Influencing Indoor Air Quality	Input
Is there an attached garage?	- yes
Is there smoking in the building?	- No
Is there new carpet or furniture?	- No
Have clothes or drapes been recently dry cleaned?	- No
Has painting or staining been done within the last six months?	- No
Has the building been recently remodeled?	- No
Has the building ever had a fire?	- No
Is there a hobby or craft area in the building?	- No
Are cleaning solvents stored in the building (e.g., spot cleaner, gun cleaner?	- No
Is there a fuel oil tank on the property?	- No
Is there a septic tank on the property?	- No
Has the building been fumigated or sprayed for pests recently?	- No
Historically the building was primarily used for?	- Residential
Do current building occupants use solvents at another location (e.g., work, hobby)?	- No

Meteorological Conditions	Input
Weather:	Sunny
Outdoor Temperature - High (°F):	57
Outdoor Temperature - Low (°F):	37
Indoor Temperature (°F):	67
Barometric Pressure Reading (mmHg):	30.18
Wind Direction:	- NE-SW
Average Wind Speed (mph):	6 mph
HVAC Setting for Current Season:	- Heat

(End of Form)

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1281 26th Ave, San Francisco, CA
Site/Facility Name:	Police Credit Union
Screening Event Date:	01/31/22
Screening Event Time:	0800
Event Weather Conditions:	45° - Sunny
Name of Person(s) Conducting Sampling:	E. Theil S. Thornton
Company Conducting Sampling:	RMD ES
Field Instrument Type[1] (List All):	PPB Rae
Instrument Calibration Date:	

1 - Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

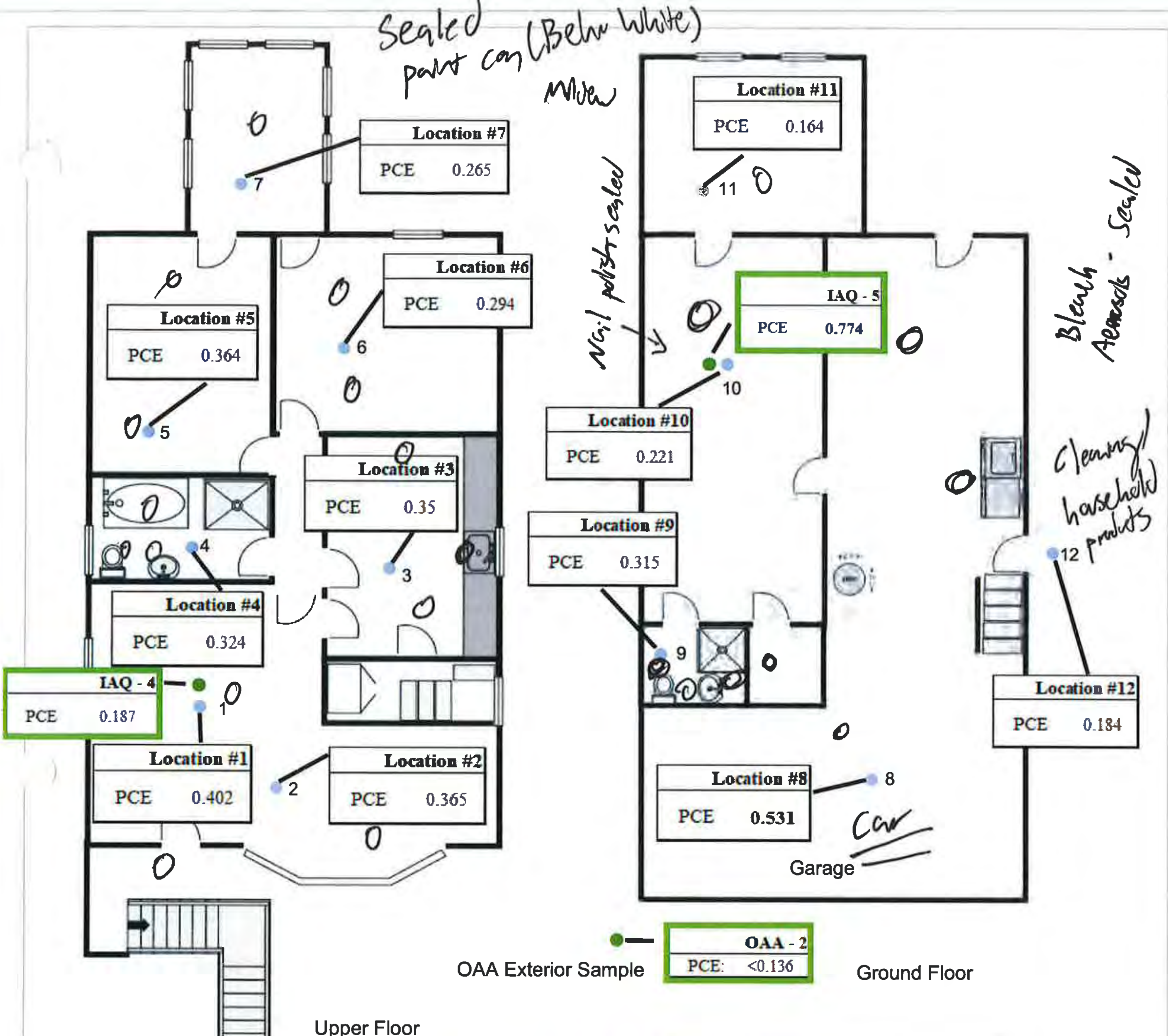
U = Upper
G = Ground

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
-U Livingroom	- Breathing zone			0	
-	-			0	
-	-				
-U Kitchen	- Breathing zone			0	
-	- Sink drain			0	
-	-				
-	-				
-U Bathroom	- Breathing zone	0		0	
-	- Toilet	0		0	
-	- Sink			0	
-	- Shower			0	
-	-				
-U Bedroom (NW)	- Breathing zone			0	
-U Sunroom	- "			0	
-U Bedroom (SW)	-			0	
-	-				
-	-				
-G Garage	- B. zone (west)			0	
-	- " (East)			0	
-	- near car			0	
-	-				
-G "Long room"	- B. Zone			0	
-	- B. Zone			0	
-	-				
-G Rear room (W)	- B. zone			0	Mildew from bath wall
-	-				about 2-3' up wall
-	-				moisture is observed
-	-				
-	-				
-	-				
-	-				

Comments:

Occupants asked to move aerosols and alcohol based products (sanitizer) outside. occupant confirmed they won't use car in garage



LEGEND

- HAPSITE Sampling Location
- AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
September 8, 2021	
SVP-33A (5 ft. bgs)	293
SVP-33B (15 ft. bgs)	528
March 3, 2021	
SVP-33A (5 ft. bgs)	260
SVP-33B (15 ft. bgs)	640
September 3, 2020	
SVP-33A (5 ft. bgs)	270
SVP-33B (15 ft. bgs)	620
SVP-33B (15 ft. bgs) duplicate	550

Notes

1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate.
3. All values are given in units of μg/m3.
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 μg/m3.
5. A bold result indicates an exceedance of the screening level for PCE.
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house.
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions

bgs: below ground surface
ft: feet
PCE: tetrachloroethene
μg/m3: micrograms per cubic meter

ELEVATE ENVIRONMENTAL CONSULTANTS INC

1281 26th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 7 and 8, 2021
San Francisco, CA

Figure **2B**

DRAFTER: KP/MV/JB

DATE: 10/20/2021

1/31/2023

CONTRACT NO.: 21-073A

Building Survey Form

Type in or select answers from drop-down lists in the righthand column.
Upload answers to GeoTracker database for criteria marked with an asterisks (*).
See Table 1 in the *Guidance on Uploading Vapor Intrusion Information into GeoTracker* (Attachment 4 of Supplemental Vapor Intrusion Guidance) for a description of Building Design Type input choices.

Person Conducting Survey	Input
Name:	Eric Theil
Company:	RMD ES
Phone Number:	650 450 6639
Email:	etheil@rmdes.net

Building Contact Information	Input
Name:	Alice Lee
Contact Title:	- Occupant
Phone Number:	
Email:	Alicvesle6700@gmail.com
Building Occupant Interviewed?	- Yes

Building Information	Input
Date of Building Survey (dd/mm/yy):	1/31/23
*Building Name:	Residential
*Building Address (Street, City):	1276 27th Ave, SF, CA
Coordinates for Center of Building (Latitude, Longitude; decimal degrees to 0.00000):	37.763690°N, 122.48550°W
*Building Location Onsite/Offsite with respect to Site/Facility:	- Offsite
*Year Built (yyyy; approximate if unsure):	1904 ?
*Building Occupants:	- 6

Building Survey Form

Building Dimensions	Input
*Building Footprint Area (within enclosed space; square feet [Ft2]):	~1100 sq ft.
Building Dimensions (at grade; feet by feet):	~ 25' x 35'
*Ceiling Height of Ground Floor (Feet):	8'
*Number of Floors (excluding the basement):	2

Building Design	Input
*Building Design Type:	- Single Unit Residential
Has the design been modified?	- No
*Foundation Type:	- Slab
*Building Vapor Intrusion Mitigation System:	- Ø
*Heating, Ventilation, & Air Conditioning (HVAC) System:	- Heating only
Type of Energy Used in Building?	- Electricity (Gas Cooking)
Energy Primarily Used For?	- Cooking.
Number of Units for Multi-Unit Buildings:	1
Number of Rooms (average per unit for multi-unit buildings):	10
Number of Exterior Doors:	3 + garage door
Number of Elevators:	Ø
Number of Active Exhaust Fans (e.g., kitchen/bathroom):	1 (kitchen)
Chimney or Other Vertical Draft Source?	- 1 (chimney)

Building Slab	Input
Slab Thickness (inches; approximate if unsure):	~3-6 inches
Large Slab Penetrations (> 1 Foot Diameter):	- NO
Soil Type 0 to 3 Feet Below Building:	- Sandy
Evidence of moisture intrusion from Below Slab?	- NO

Building Survey Form

Building Windows	Input
Number of Windows:	10
Weather Sealed Windows and Exterior Doors?	- Ø
Average Area of Window Open to Outside Air (Feet2):	10 ft²
Ventilation During Sampling:	- Ø

Building Crawl Space	Input
Crawl Space Height (Feet):	Ø
Number Crawl Space Vents:	
Average Area per Crawl Space Vent (Feet2):	
Evidence of moisture intrusion into Crawl Space from Soil?	-

Building Basement	Input
Basement Height (Feet):	Ø
Basement Footprint Area (Feet2):	
Basement Wall Area Below Ground Surface (Feet2):	
Exposed Basement above grade?	-
Vents or Windows above-grade in exposed basement?	-
Unfinished Basement?	-
Evidence of moisture intrusion into Basement from Soil?	-

Building Survey Form

Factors Potentially Influencing Indoor Air Quality	Input
Is there an attached garage?	- Yes
Is there smoking in the building?	- Ø
Is there new carpet or furniture?	- Ø
Have clothes or drapes been recently dry cleaned?	- Ø
Has painting or staining been done within the last six months?	- Ø
Has the building been recently remodeled?	- Ø
Has the building ever had a fire?	- Ø
Is there a hobby or craft area in the building?	- Ø
Are cleaning solvents stored in the building (e.g., spot cleaner, gun cleaner?	- Ø
Is there a fuel oil tank on the property?	- Ø
Is there a septic tank on the property?	- Ø
Has the building been fumigated or sprayed for pests recently?	- Ø
Historically the building was primarily used for?	- Residential
Do current building occupants use solvents at another location (e.g., work, hobby)?	- Ø

Meteorological Conditions	Input
Weather:	Sunny
Outdoor Temperature - High (°F):	57
Outdoor Temperature - Low (°F):	37
Indoor Temperature (°F):	66
Barometric Pressure Reading (mmHg):	30.18
Wind Direction:	- NE-SW
Average Wind Speed (mph):	6 mph
HVAC Setting for Current Season:	- Heat

(End of Form)

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1276 27th Ave, San Francisco, CA
Site/Facility Name:	Police Credit Union
Screening Event Date:	01 / 31 / 23
Screening Event Time:	1000
Event Weather Conditions:	Sunny
Name of Person(s) Conducting Sampling:	B. Engfert J. Thornton
Company Conducting Sampling:	RMD ES
Field Instrument Type[1] (List All):	PPB Rae
Instrument Calibration Date:	

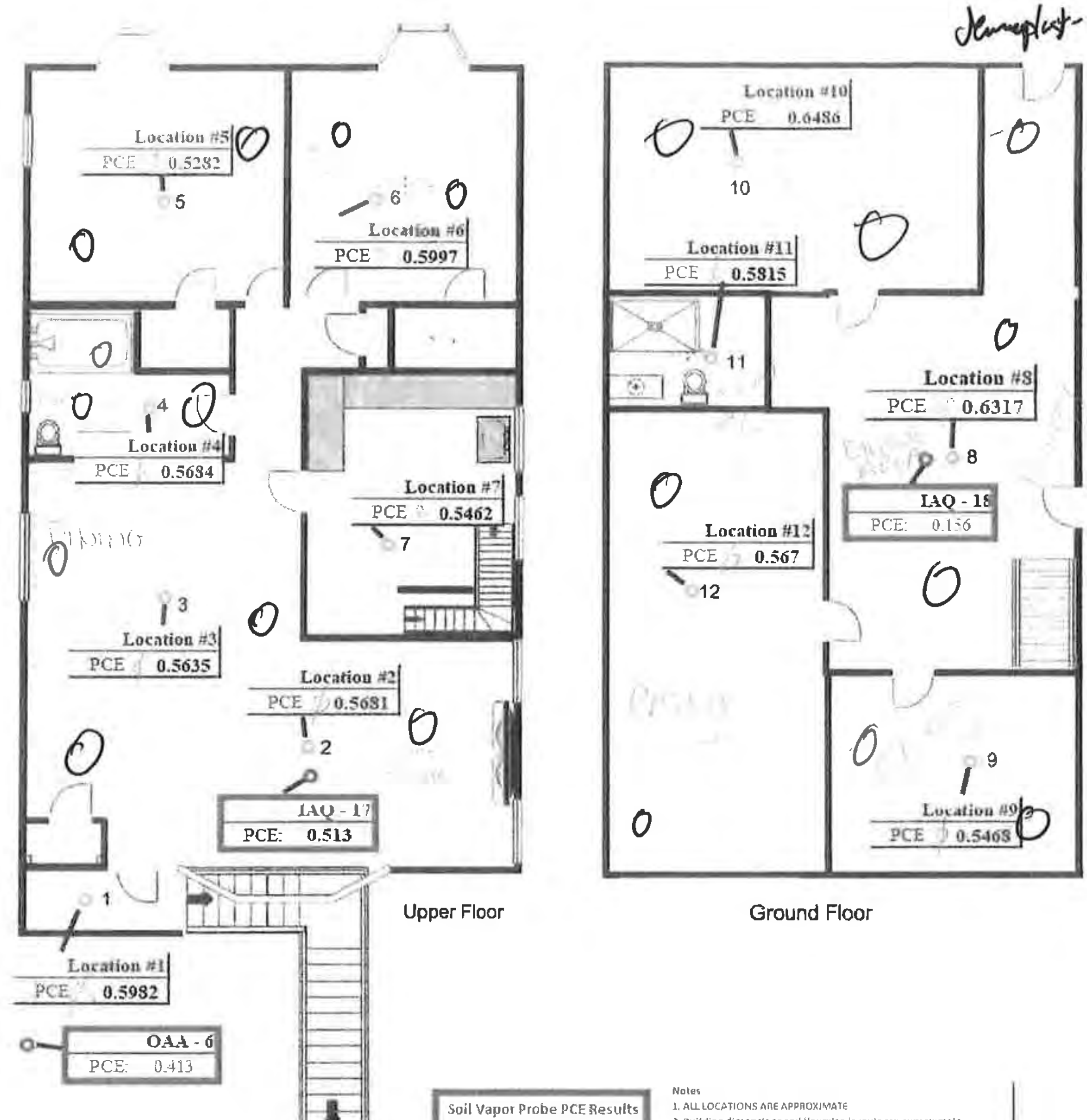
1- Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- Upper Bed (NE)	- BZ		0	PPB	
- Bed 2 (SE)	-		0		Hand Sanitizer
- Dining	-		0		
- Living	-		0		
- Kitchen	- BZ		0		
-	- Sink		0		
- Bathroom	- BZ				
-	- Sink		0		
-	- toilet		0		
-	- Shower drain		0		
-	-				
- Ground Bed (E)	- BZ		0		
- Bed (W)	-		0		
- Garage	-		0		
- Dining area	-		0		
- Bathroom	-		0		
-	- Sink		0		
-	- toilet		0		
-	- shower drain		0		
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				
-	-				

Comments:

Occupant asked to move alcohol based and aerosol products outside and not bring car into garage



OAA Exterior Sample

LEGEND

HAPSITE Sampling Location

AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
October 1, 2021	
SVP-28A (5 ft. bgs)	115
SVP-28B (15 ft. bgs)	171
September 10, 2021	
SVP-28A (5 ft. bgs)	109
SVP-28B (15 ft. bgs)	217
March 2, 2021	
SVP-28A (5 ft. bgs)	94
SVP-28B (15 ft. bgs)	290
September 2, 2020	
SVP-28A (5 ft. bgs)	120
SVP-28B (15 ft. bgs)	6.4

Notes
1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate
3. All values are given in units of μg/m3
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 μg/m3
5. A bold result indicates an exceedance of the screening level for PCE
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house.
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions
bgs: below ground surface
ft: feet
PCE: tetrachloroethene
μg/m3: micrograms per cubic meter

ELEVATE

127627Th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 30 and October 1, 2021
San Francisco, CA

Figure
2F

DRAFTER: KP/JB

DATE: 10/20/2021

CONTRACT NO.: 21-073A

∅ = NO VOCS DETECTED w/ [illegible]

1/31/2023

Building Survey Form

Type in or select answers from drop-down lists in the righthand column.
Upload answers to GeoTracker database for criteria marked with an asterisks (*).
See Table 1 in the *Guidance on Uploading Vapor Intrusion Information into GeoTracker* (Attachment 4 of Supplemental Vapor Intrusion Guidance) for a description of Building Design Type input choices.

Person Conducting Survey	Input
Name:	Eric Theil
Company:	RMD ES
Phone Number:	650 450 1639
Email:	etheil@rmdes.net

Building Contact Information	Input
Name:	Richard Chui
Contact Title:	- Occupant
Phone Number:	
Email:	Richard.Chui@outlook.com
Building Occupant Interviewed?	- Yes

Building Information	Input
Date of Building Survey (dd/mm/yy):	1/[illegible]/23
*Building Name:	~~1284 27th~~ Residential
*Building Address (Street, City):	1284 27th Ave, SF, CA
Coordinates for Center of Building (Latitude, Longitude; decimal degrees to 0.00000):	37.76353°N, 122.48551°W
*Building Location Onsite/Offsite with respect to Site/Facility:	- offsite
*Year Built (yyyy; approximate if unsure):	
*Building Occupants:	- ~8

Building Survey Form

Building Dimensions	Input
*Building Footprint Area (within enclosed space; square feet [Ft2]):	~1100 sq ft.
Building Dimensions (at grade; feet by feet):	~25 x 40
*Ceiling Height of Ground Floor (Feet):	8'
*Number of Floors (excluding the basement):	2

Building Design	Input
*Building Design Type:	- Single Unit residential
Has the design been modified?	- 2019 remodel (total remodel)
*Foundation Type:	- Slab on grade
*Building Vapor Intrusion Mitigation System:	- No
*Heating, Ventilation, & Air Conditioning (HVAC) System:	- Heating only (furnace)
Type of Energy Used in Building?	- gas furnace/Stove + electric
Energy Primarily Used For?	- Cooking, laundry, heating
Number of Units for Multi-Unit Buildings:	2
Number of Rooms (average per unit for multi-unit buildings):	15
Number of Exterior Doors:	5 + garage door
Number of Elevators:	0
Number of Active Exhaust Fans (e.g., kitchen/bathroom):	6
Chimney or Other Vertical Draft Source?	- ~~8~~

Building Slab	Input
Slab Thickness (inches; approximate if unsure):	~3-6"
Large Slab Penetrations (> 1 Foot Diameter):	- NO
Soil Type 0 to 3 Feet Below Building:	- Sandy ?
Evidence of moisture intrusion from Below Slab?	- NO

Building Survey Form

Building Windows	Input
Number of Windows:	8
Weather Sealed Windows and Exterior Doors?	- Ø
Average Area of Window Open to Outside Air (Feet2):	10 ft^2
Ventilation During Sampling:	- Ø

Building Crawl Space	Input
Crawl Space Height (Feet):	Ø
Number Crawl Space Vents:	
Average Area per Crawl Space Vent (Feet2):	
Evidence of moisture intrusion into Crawl Space from Soil?	-

Building Basement	Input
Basement Height (Feet):	Ø
Basement Footprint Area (Feet2):	
Basement Wall Area Below Ground Surface (Feet2):	
Exposed Basement above grade?	-
Vents or Windows above-grade in exposed basement?	-
Unfinished Basement?	-
Evidence of moisture intrusion into Basement from Soil?	-

Building Survey Form

Factors Potentially Influencing Indoor Air Quality	Input
Is there an attached garage?	- yes
Is there smoking in the building?	- Ø
Is there new carpet or furniture?	- Ø
Have clothes or drapes been recently dry cleaned?	- Ø
Has painting or staining been done within the last six months?	- Ø
Has the building been recently remodeled?	- Ø (2019)
Has the building ever had a fire?	- Ø
Is there a hobby or craft area in the building?	- Ø
Are cleaning solvents stored in the building (e.g., spot cleaner, gun cleaner?	- laundry
Is there a fuel oil tank on the property?	- Ø
Is there a septic tank on the property?	- Ø
Has the building been fumigated or sprayed for pests recently?	- Ø
Historically the building was primarily used for?	- residential
Do current building occupants use solvents at another location (e.g., work, hobby)?	- Ø

Meteorological Conditions	Input
Weather:	Sunny
Outdoor Temperature - High (°F):	57
Outdoor Temperature - Low (°F):	37
Indoor Temperature (°F):	67
Barometric Pressure Reading (mmHg):	30.18
Wind Direction:	- NE-SW
Average Wind Speed (mph):	6 mph
HVAC Setting for Current Season:	- Heat

(End of Form)

Indoor Air Source Screen Form

This form should be used while conducting field screening (Step 3A.3, Supplemental Vapor Intrusion Guidance). An Indoor Air Source Screen Survey of indoor air will help identify potential sources of vapor forming chemicals (VFCs) and/or potential subsurface vapor entry points. Common screening tools, such as, Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), or Gas Chromatography-Electron Capture Detector (GC-ECD), should be used to detect the presence of VFCs in the air.

Use this form to document the room/area and location where the measurement was recorded during the Indoor Air Source Screen Survey, the field instrument type used, and the instrument reading and units. If a consumer product is identified and surrounding air tested, the location and the volatile ingredients of the product should be noted. (If the item(s) may be contributing VFCs to the indoor air, the items should be removed in advance of indoor air sampling.) This survey should be used to support the development of a conceptual understanding of how vapor intrusion may be occurring at the building and used in selecting sample locations for evaluating spatial distribution of VFCs in indoor air.

Site Information	Input
Building Address:	1284 27th Ave
Site/Facility Name:	Police Credit Union
Screening Event Date:	01/31/23
Screening Event Time:	0900
Event Weather Conditions:	Clear / Sunny
Name of Person(s) Conducting Sampling:	E. Theil B. Englert
Company Conducting Sampling:	RMD ES
Field Instrument Type[1] (List All):	ppbrae
Instrument Calibration Date:	

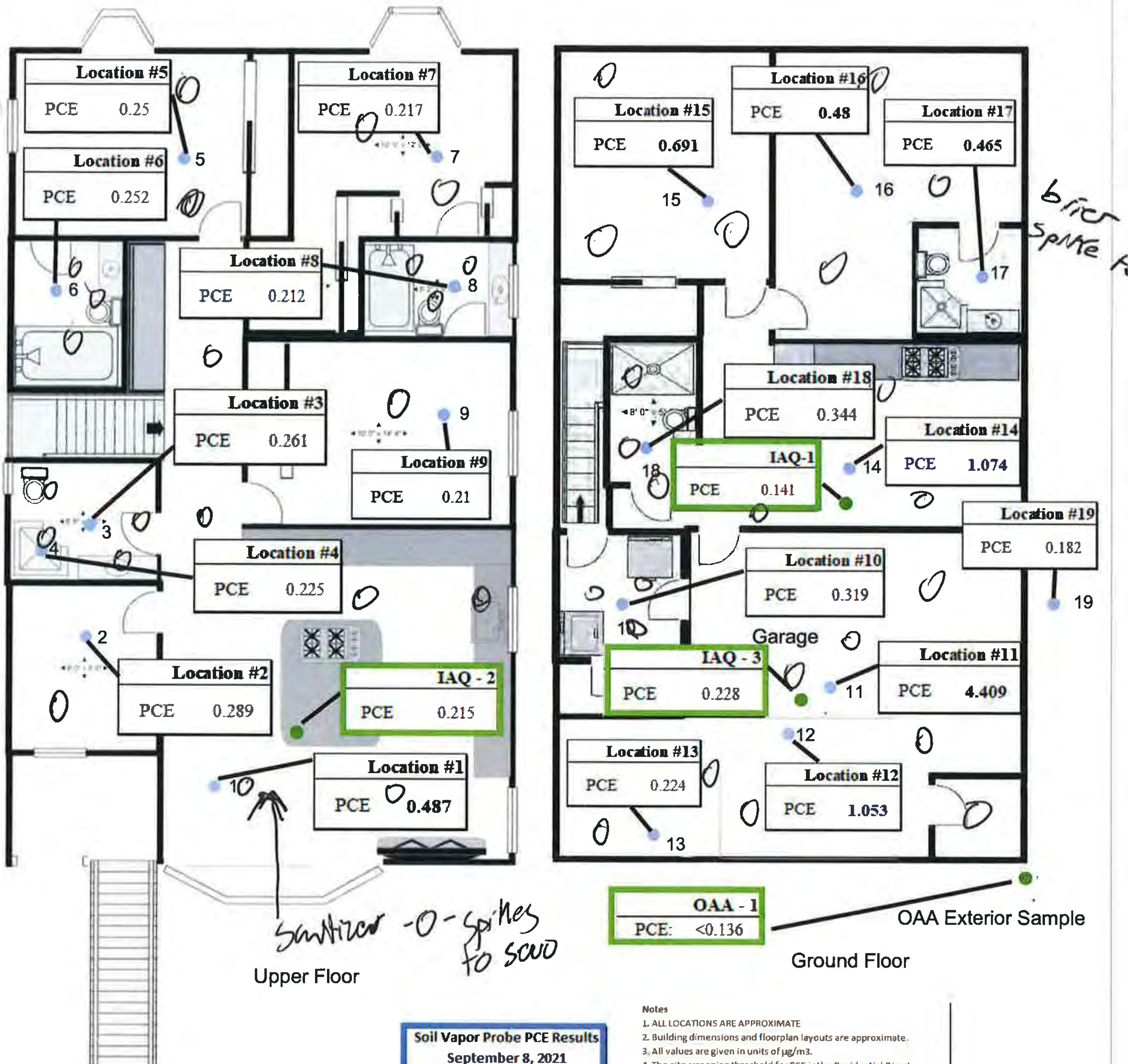
[1] Photoionization Detector (PID), Gas Chromatography-Photoionization Detector (GC-PID), Gas Chromatography-Mass Spectrometry (GC-MS), Gas Chromatography-Electron Capture Detector (GC-ECD), etc.

Indoor Air Source Screen Form

Sample Room/Area	Sample Location	Sample ID	Instrument Reading	Units	Volatile Ingredients in Consumer Products Identified Near Sample
- Living room	- breathing zone		0.0	ppb	
- kitchen	- breathing zone		0.0		
-	- sink drain		0.0		
- Upper floor bedroom	- breathing zone		0.0		
- Upper floor bathroom 1	- breathing zone		0.0		
-	- shower drain		0.0		
-	- sink drain		0.0		
-	- toilet		0.0		
- UF bedroom 2	- breathing zone		0.0		
- UF Bathroom 2	- breathing zone		0.0		
-	- shower drain		0.0		
-	- sink drain		0.0		
-	- toilet		0.0		
- UF bedroom 3	- breathing zone		0.0		
- UF bathroom 3	- breathing zone		0.0		
-	- shower drain		0.0		
-	- sink drain		0.0		
-	- toilet		0.0		
- Garage	- breathing zones		0.0		
-	-		0.0		
-	-		0.0		
-	-		0.0		
- LF kitchen	- sink drain		0.0		
-	- breathing zone		0.0		
- Laundry room	- breathing zone		0.0		
- LF bedroom 1	- breathing zone		0.0		
- LF bathroom 1	- sink drain		0.0		
-	- shower drain		0.0		
-	- toilet		0.0		
-	- breathing zone		0.0		
- LF bedroom 2	- breathing zone		0.0		

Comments:

LF bathroom 2 sink drain 0.0
shower drain 0.0
toilet 0.0
breathing zone 0.0



LEGEND

- HAPSITE Sampling Location
- AllWest SUMMA Can Sampling Location

Soil Vapor Probe PCE Results	
September 8, 2021	
SVP-30A (5 ft. bgs)	83.5
SVP-30B (15 ft. bgs)	248
March 2, 2021	
SVP-30A (5 ft. bgs)	160
SVP-30B (15 ft. bgs)	350
September 2, 2020	
SVP-30A (5 ft. bgs)	120
SVP-30B (15 ft. bgs)	12

Notes

1. ALL LOCATIONS ARE APPROXIMATE
2. Building dimensions and floorplan layouts are approximate.
3. All values are given in units of µg/m3.
4. The site screening threshold for PCE is the Residential Direct Exposure Human Health Risk level for indoor air from the 2019 SF RWQCB ESLs of 0.46 µg/m3.
5. A bold result indicates an exceedance of the screening level for PCE
6. The ESL screening levels are based on long term concentrations so instantaneous readings, such as those from a HAPSITE, may not be directly comparable.
7. Soil vapor results were collected by AllWest from soil vapor probes installed in the sidewalk in front of the house.
8. Summa can results are highlighted in green, soil vapor results are highlighted in blue, and Hapsite results are not highlighted.

Definitions

bgs: below ground surface
ft: feet
PCE: tetrachloroethene
µg/m3: micrograms per cubic meter

ELEVATE ENVIRONMENTAL CONSULTING

1284 27th Ave.
HAPSITE, Soil Vapor, and Summa Can PCE Sampling Results
September 7 and 8, 2021
San Francisco, CA

Figure **2A**

1/31/2023

DRAFTER: KP/MV/JB DATE: 10/20/2021 CONTRACT NO.: 21-073A

Appendix D

Analytical Laboratory Reports

ANALYTICAL REPORT

March 09, 2022

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

RMD Environmental - Walnut Creek, CA

Sample Delivery Group:	L1468315
Samples Received:	03/05/2022
Project Number:	01-DTSC-007
Description:	Police Credit Union
Report To:	Ivy Inouye 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596

Entire Report Reviewed By:

Jordan N Zito
Project Manager

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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Cp
Tc
Ss
Cn
Ds
Sr
Qc
Gl
Al
Sc

VP-1271-1 L1468315-01 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/04/22 11:05	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 15:13	03/06/22 15:13	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828077	1	03/06/22 12:45	03/06/22 12:45	DBB	Mt. Juliet, TN

SVP-28A L1468315-02 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/03/22 15:59	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 15:56	03/06/22 15:56	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828077	1	03/06/22 12:48	03/06/22 12:48	DBB	Mt. Juliet, TN

SVP-28B L1468315-03 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/03/22 14:26	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 16:40	03/06/22 16:40	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:06	03/09/22 11:06	DBB	Mt. Juliet, TN

SVP-29A L1468315-04 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/04/22 12:25	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 17:25	03/06/22 17:25	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:13	03/09/22 11:13	DBB	Mt. Juliet, TN

SVP-29B L1468315-05 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/04/22 12:49	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 18:08	03/06/22 18:08	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:16	03/09/22 11:16	DBB	Mt. Juliet, TN

SVP-30A L1468315-06 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/04/22 13:28	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 18:51	03/06/22 18:51	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:21	03/09/22 11:21	DBB	Mt. Juliet, TN

SVP-30A-DUP L1468315-07 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/04/22 13:28	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 19:35	03/06/22 19:35	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:27	03/09/22 11:27	DBB	Mt. Juliet, TN

SVP-30B L1468315-08 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/04/22 13:59	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 20:18	03/06/22 20:18	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:31	03/09/22 11:31	DBB	Mt. Juliet, TN

SVP-31A L1468315-09 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/02/22 14:02	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 21:02	03/06/22 21:02	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:41	03/09/22 11:41	DBB	Mt. Juliet, TN

SVP-31B L1468315-10 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/02/22 14:40	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 21:46	03/06/22 21:46	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:49	03/09/22 11:49	DBB	Mt. Juliet, TN

SVP-32A L1468315-11 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/03/22 13:31	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 22:29	03/06/22 22:29	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:52	03/09/22 11:52	DBB	Mt. Juliet, TN

SVP-32B L1468315-12 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/03/22 14:03	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 23:15	03/06/22 23:15	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 11:56	03/09/22 11:56	DBB	Mt. Juliet, TN

SVP-33A L1468315-13 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/03/22 14:50	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/06/22 23:59	03/06/22 23:59	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 12:00	03/09/22 12:00	DBB	Mt. Juliet, TN

SVP-33A-DUP L1468315-14 Air

Collected by	Collected date/time	Received date/time
BA/EM	03/03/22 14:49	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/07/22 00:43	03/07/22 00:43	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 12:04	03/09/22 12:04	DBB	Mt. Juliet, TN

			Collected by	Collected date/time	Received date/time	
SVP-33B L1468315-15 Air			BA/EM	03/03/22 15:23	03/05/22 09:30	

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1828189	1	03/07/22 01:27	03/07/22 01:27	CAW	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG1828193	1	03/09/22 12:08	03/09/22 12:08	DBB	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jordan N Zito
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
VP-1271-1	L1468315-01	Acetone	67-64-1	58.10	1.25	2.97	1.63	3.87		1	WG1828189
VP-1271-1	L1468315-01	Benzene	71-43-2	78.10	0.200	0.639	0.264	0.843		1	WG1828189
VP-1271-1	L1468315-01	Carbon disulfide	75-15-0	76.10	0.200	0.622	0.219	0.682		1	WG1828189
VP-1271-1	L1468315-01	Cyclohexane	110-82-7	84.20	0.200	0.689	0.263	0.906		1	WG1828189
VP-1271-1	L1468315-01	Ethanol	64-17-5	46.10	1.25	2.36	4.56	8.60		1	WG1828189
VP-1271-1	L1468315-01	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.556	3.12		1	WG1828189
VP-1271-1	L1468315-01	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.924	4.57		1	WG1828189
VP-1271-1	L1468315-01	Tetrachloroethylene	127-18-4	166	0.200	1.36	10.2	69.3		1	WG1828189
VP-1271-1	L1468315-01	Trichloroethylene	79-01-6	131	0.200	1.07	0.215	1.15		1	WG1828189
VP-1271-1	L1468315-01	m&p-Xylene	1330-20-7	106	0.400	1.73	ND	1.73		1	WG1828189
SVP-28A	L1468315-02	Acetone	67-64-1	58.10	1.25	2.97	3.94	9.36		1	WG1828189
SVP-28A	L1468315-02	Chloromethane	74-87-3	50.50	0.200	0.413	0.330	0.682		1	WG1828189
SVP-28A	L1468315-02	Ethanol	64-17-5	46.10	1.25	2.36	17.5	33.0		1	WG1828189
SVP-28A	L1468315-02	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.202	1.14		1	WG1828189
SVP-28A	L1468315-02	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.448	2.22		1	WG1828189
SVP-28A	L1468315-02	Tetrachloroethylene	127-18-4	166	0.200	1.36	14.1	95.7		1	WG1828189
SVP-28A	L1468315-02	Trichloroethylene	79-01-6	131	0.200	1.07	0.696	3.73		1	WG1828189
SVP-28B	L1468315-03	Acetone	67-64-1	58.10	1.25	2.97	1.29	3.07		1	WG1828189
SVP-28B	L1468315-03	cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.342	1.36		1	WG1828189
SVP-28B	L1468315-03	trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.355	1.41		1	WG1828189
SVP-28B	L1468315-03	Ethanol	64-17-5	46.10	1.25	2.36	1.54	2.90		1	WG1828189
SVP-28B	L1468315-03	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.233	1.31		1	WG1828189
SVP-28B	L1468315-03	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.534	2.64		1	WG1828189
SVP-28B	L1468315-03	Tetrachloroethylene	127-18-4	166	0.200	1.36	56.5	384		1	WG1828189
SVP-28B	L1468315-03	1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.292	1.59		1	WG1828189
SVP-28B	L1468315-03	Trichloroethylene	79-01-6	131	0.200	1.07	8.16	43.7		1	WG1828189
SVP-29A	L1468315-04	Acetone	67-64-1	58.10	1.25	2.97	1.35	3.21		1	WG1828189
SVP-29A	L1468315-04	Chloromethane	74-87-3	50.50	0.200	0.413	0.327	0.675		1	WG1828189
SVP-29A	L1468315-04	Cyclohexane	110-82-7	84.20	0.200	0.689	0.229	0.789		1	WG1828189
SVP-29A	L1468315-04	Ethanol	64-17-5	46.10	1.25	2.36	2.12	4.00		1	WG1828189
SVP-29A	L1468315-04	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.219	1.23		1	WG1828189
SVP-29A	L1468315-04	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.468	2.31		1	WG1828189
SVP-29A	L1468315-04	Tetrachloroethylene	127-18-4	166	0.200	1.36	16.9	115		1	WG1828189
SVP-29A	L1468315-04	Trichloroethylene	79-01-6	131	0.200	1.07	0.818	4.38		1	WG1828189
SVP-29B	L1468315-05	Acetone	67-64-1	58.10	1.25	2.97	3.82	9.08		1	WG1828189
SVP-29B	L1468315-05	Chloromethane	74-87-3	50.50	0.200	0.413	0.490	1.01		1	WG1828189
SVP-29B	L1468315-05	Cyclohexane	110-82-7	84.20	0.200	0.689	0.263	0.906		1	WG1828189
SVP-29B	L1468315-05	Ethanol	64-17-5	46.10	1.25	2.36	37.1	70.0		1	WG1828189
SVP-29B	L1468315-05	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.219	1.23		1	WG1828189
SVP-29B	L1468315-05	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.495	2.45		1	WG1828189
SVP-29B	L1468315-05	Methylene Chloride	75-09-2	84.90	0.200	0.694	0.278	0.965		1	WG1828189
SVP-29B	L1468315-05	2-Propanol	67-63-0	60.10	1.25	3.07	2.81	6.91		1	WG1828189
SVP-29B	L1468315-05	Tetrachloroethylene	127-18-4	166	0.200	1.36	8.50	57.7		1	WG1828189
SVP-30A	L1468315-06	Acetone	67-64-1	58.10	1.25	2.97	2.28	5.42		1	WG1828189
SVP-30A	L1468315-06	Cyclohexane	110-82-7	84.20	0.200	0.689	0.665	2.29		1	WG1828189
SVP-30A	L1468315-06	trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.254	1.01		1	WG1828189
SVP-30A	L1468315-06	Ethanol	64-17-5	46.10	1.25	2.36	13.0	24.5		1	WG1828189
SVP-30A	L1468315-06	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.203	1.14		1	WG1828189
SVP-30A	L1468315-06	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.493	2.44		1	WG1828189
SVP-30A	L1468315-06	Heptane	142-82-5	100	0.200	0.818	0.270	1.10		1	WG1828189
SVP-30A	L1468315-06	2-Propanol	67-63-0	60.10	1.25	3.07	1.86	4.57		1	WG1828189
SVP-30A	L1468315-06	Tetrachloroethylene	127-18-4	166	0.200	1.36	13.3	90.3		1	WG1828189
SVP-30A	L1468315-06	Toluene	108-88-3	92.10	0.500	1.88	1.08	4.07		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
SVP-30A-DUP	L1468315-07	Cyclohexane	110-82-7	84.20	0.200	0.689	0.564	1.94		1	WG1828189
SVP-30A-DUP	L1468315-07	Ethanol	64-17-5	46.10	1.25	2.36	2.97	5.60		1	WG1828189
SVP-30A-DUP	L1468315-07	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.236	1.33		1	WG1828189
SVP-30A-DUP	L1468315-07	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.494	2.44		1	WG1828189
SVP-30A-DUP	L1468315-07	Tetrachloroethylene	127-18-4	166	0.200	1.36	19.3	131		1	WG1828189
SVP-30A-DUP	L1468315-07	Trichloroethylene	79-01-6	131	0.200	1.07	0.512	2.74		1	WG1828189
SVP-30B	L1468315-08	Acetone	67-64-1	58.10	1.25	2.97	4.24	10.1		1	WG1828189
SVP-30B	L1468315-08	Chloromethane	74-87-3	50.50	0.200	0.413	0.250	0.516		1	WG1828189
SVP-30B	L1468315-08	Ethanol	64-17-5	46.10	1.25	2.36	14.8	27.9		1	WG1828189
SVP-30B	L1468315-08	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.215	1.21		1	WG1828189
SVP-30B	L1468315-08	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.542	2.68		1	WG1828189
SVP-30B	L1468315-08	Heptane	142-82-5	100	0.200	0.818	0.204	0.834		1	WG1828189
SVP-30B	L1468315-08	2-Propanol	67-63-0	60.10	1.25	3.07	1.80	4.42		1	WG1828189
SVP-30B	L1468315-08	Tetrachloroethylene	127-18-4	166	0.200	1.36	29.8	202		1	WG1828189
SVP-30B	L1468315-08	Toluene	108-88-3	92.10	0.500	1.88	0.714	2.69		1	WG1828189
SVP-31A	L1468315-09	Acetone	67-64-1	58.10	1.25	2.97	1.86	4.42		1	WG1828189
SVP-31A	L1468315-09	Chloroform	67-66-3	119	0.200	0.973	0.410	2.00		1	WG1828189
SVP-31A	L1468315-09	Chloromethane	74-87-3	50.50	0.200	0.413	0.348	0.719		1	WG1828189
SVP-31A	L1468315-09	Ethanol	64-17-5	46.10	1.25	2.36	1.43	2.70		1	WG1828189
SVP-31A	L1468315-09	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.363	2.04		1	WG1828189
SVP-31A	L1468315-09	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	1.36	6.73		1	WG1828189
SVP-31A	L1468315-09	Tetrachloroethylene	127-18-4	166	0.200	1.36	11.9	80.8		1	WG1828189
SVP-31B	L1468315-10	Acetone	67-64-1	58.10	1.25	2.97	4.84	11.5		1	WG1828189
SVP-31B	L1468315-10	Cyclohexane	110-82-7	84.20	0.200	0.689	1.64	5.65		1	WG1828189
SVP-31B	L1468315-10	Ethanol	64-17-5	46.10	1.25	2.36	7.86	14.8		1	WG1828189
SVP-31B	L1468315-10	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.537	3.02		1	WG1828189
SVP-31B	L1468315-10	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	2.03	10.0		1	WG1828189
SVP-31B	L1468315-10	Tetrachloroethylene	127-18-4	166	0.200	1.36	27.4	186		1	WG1828189
SVP-31B	L1468315-10	Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.443	1.31		1	WG1828189
SVP-31B	L1468315-10	1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.204	1.11		1	WG1828189
SVP-32A	L1468315-11	Acetone	67-64-1	58.10	1.25	2.97	1.85	4.40		1	WG1828189
SVP-32A	L1468315-11	Chloroform	67-66-3	119	0.200	0.973	0.859	4.18		1	WG1828189
SVP-32A	L1468315-11	Chloromethane	74-87-3	50.50	0.200	0.413	0.234	0.483		1	WG1828189
SVP-32A	L1468315-11	Ethanol	64-17-5	46.10	1.25	2.36	6.56	12.4		1	WG1828189
SVP-32A	L1468315-11	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.678	3.81		1	WG1828189
SVP-32A	L1468315-11	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	2.01	9.94		1	WG1828189
SVP-32A	L1468315-11	Tetrachloroethylene	127-18-4	166	0.200	1.36	10.9	74.0		1	WG1828189
SVP-32B	L1468315-12	Acetone	67-64-1	58.10	1.25	2.97	4.22	10.0		1	WG1828189
SVP-32B	L1468315-12	Chloroform	67-66-3	119	0.200	0.973	0.616	3.00		1	WG1828189
SVP-32B	L1468315-12	Cyclohexane	110-82-7	84.20	0.200	0.689	1.29	4.44		1	WG1828189
SVP-32B	L1468315-12	Ethanol	64-17-5	46.10	1.25	2.36	5.47	10.3		1	WG1828189
SVP-32B	L1468315-12	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.775	4.36		1	WG1828189
SVP-32B	L1468315-12	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	3.05	15.1		1	WG1828189
SVP-32B	L1468315-12	Tetrachloroethylene	127-18-4	166	0.200	1.36	27.5	187		1	WG1828189
SVP-32B	L1468315-12	m&p-Xylene	1330-20-7	106	0.400	1.73	0.497	2.15		1	WG1828189
SVP-33A	L1468315-13	Acetone	67-64-1	58.10	1.25	2.97	1.40	3.33		1	WG1828189
SVP-33A	L1468315-13	Benzene	71-43-2	78.10	0.200	0.639	0.336	1.07		1	WG1828189
SVP-33A	L1468315-13	Chloroform	67-66-3	119	0.200	0.973	0.548	2.67		1	WG1828189
SVP-33A	L1468315-13	Chloromethane	74-87-3	50.50	0.200	0.413	0.241	0.498		1	WG1828189
SVP-33A	L1468315-13	Ethanol	64-17-5	46.10	1.25	2.36	9.06	17.1		1	WG1828189
SVP-33A	L1468315-13	Ethylbenzene	100-41-4	106	0.200	0.867	0.320	1.39		1	WG1828189
SVP-33A	L1468315-13	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.719	4.04		1	WG1828189
SVP-33A	L1468315-13	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	2.94	14.5		1	WG1828189
SVP-33A	L1468315-13	Tetrachloroethylene	127-18-4	166	0.200	1.36	25.3	172		1	WG1828189
SVP-33A	L1468315-13	1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.280	1.37		1	WG1828189
SVP-33A	L1468315-13	m&p-Xylene	1330-20-7	106	0.400	1.73	0.584	2.53		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
SVP-33A-DUP	L1468315-14	Chloroform	67-66-3	119	0.200	0.973	0.581	2.83		1	WG1828189
SVP-33A-DUP	L1468315-14	Cyclohexane	110-82-7	84.20	0.200	0.689	1.78	6.13		1	WG1828189
SVP-33A-DUP	L1468315-14	Ethanol	64-17-5	46.10	1.25	2.36	5.97	11.3		1	WG1828189
SVP-33A-DUP	L1468315-14	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.707	3.97		1	WG1828189
SVP-33A-DUP	L1468315-14	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	3.06	15.1		1	WG1828189
SVP-33A-DUP	L1468315-14	Tetrachloroethylene	127-18-4	166	0.200	1.36	26.5	180		1	WG1828189
SVP-33B	L1468315-15	Chloroform	67-66-3	119	0.200	0.973	0.563	2.74		1	WG1828189
SVP-33B	L1468315-15	Ethanol	64-17-5	46.10	1.25	2.36	2.71	5.11		1	WG1828189
SVP-33B	L1468315-15	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.775	4.36		1	WG1828189
SVP-33B	L1468315-15	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	3.85	19.0		1	WG1828189
SVP-33B	L1468315-15	Tetrachloroethylene	127-18-4	166	0.200	1.36	53.0	360		1	WG1828189

Organic Compounds (GC) by Method ASTM 1946

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
SVP-28B	L1468315-03	Helium	7440-59-7		0.100	0.355		1	WG1828193
SVP-29A	L1468315-04	Helium	7440-59-7		0.100	0.321		1	WG1828193
SVP-29B	L1468315-05	Helium	7440-59-7		0.100	0.137		1	WG1828193
SVP-30A	L1468315-06	Helium	7440-59-7		0.100	0.270		1	WG1828193
SVP-30A-DUP	L1468315-07	Helium	7440-59-7		0.100	0.628		1	WG1828193
SVP-30B	L1468315-08	Helium	7440-59-7		0.100	0.217		1	WG1828193
SVP-31A	L1468315-09	Helium	7440-59-7		0.100	0.438		1	WG1828193
SVP-31B	L1468315-10	Helium	7440-59-7		0.100	0.371		1	WG1828193
SVP-32A	L1468315-11	Helium	7440-59-7		0.100	0.275		1	WG1828193
SVP-32B	L1468315-12	Helium	7440-59-7		0.100	0.369		1	WG1828193
SVP-33A	L1468315-13	Helium	7440-59-7		0.100	0.168		1	WG1828193
SVP-33A-DUP	L1468315-14	Helium	7440-59-7		0.100	0.462		1	WG1828193
SVP-33B	L1468315-15	Helium	7440-59-7		0.100	0.447		1	WG1828193

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.63	3.87		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	0.264	0.843		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.219	0.682		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	0.263	0.906		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	4.56	8.60		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.556	3.12		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.924	4.57		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	10.2	69.3		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	0.215	1.15		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	1.73		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*86.5*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG1828077

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.94	9.36		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	0.330	0.682		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	17.5	33.0		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.202	1.14		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.448	2.22		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	14.1	95.7		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	0.696	3.73		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*87.5*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG1828077

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.29	3.07		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.342	1.36		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.355	1.41		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	1.54	2.90		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.233	1.31		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.534	2.64		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	56.5	384		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.292	1.59		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	8.16	43.7		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.2*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.355		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.35	3.21		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	0.327	0.675		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	0.229	0.789		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	2.12	4.00		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.219	1.23		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.468	2.31		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	16.9	115		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	0.818	4.38		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.0*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.321		1	WG1828193

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.82	9.08		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	0.490	1.01		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	0.263	0.906		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	37.1	70.0		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.219	1.23		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.495	2.45		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.278	0.965		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	2.81	6.91		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	8.50	57.7		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.2*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.137		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.28	5.42		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	0.665	2.29		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.254	1.01		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	13.0	24.5		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.203	1.14		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.493	2.44		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	0.270	1.10		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	1.86	4.57		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	13.3	90.3		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	1.08	4.07		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.1*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.270		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	0.564	1.94		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	2.97	5.60		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.236	1.33		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.494	2.44		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	19.3	131		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	0.512	2.74		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*86.4*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.628		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.24	10.1		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	0.250	0.516		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	14.8	27.9		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.215	1.21		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.542	2.68		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	0.204	0.834		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	1.80	4.42		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	29.8	202		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	0.714	2.69		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.7*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.217		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.86	4.42		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	0.410	2.00		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	0.348	0.719		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	1.43	2.70		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.363	2.04		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	1.36	6.73		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	11.9	80.8		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.4*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.438		1	WG1828193

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.84	11.5		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	1.64	5.65		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	7.86	14.8		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.537	3.02		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	2.03	10.0		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	27.4	186		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.443	1.31		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.204	1.11		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.1*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.371		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.85	4.40		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	0.859	4.18		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	0.234	0.483		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	6.56	12.4		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.678	3.81		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	2.01	9.94		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	10.9	74.0		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*84.1*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.275		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.22	10.0		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	0.616	3.00		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	1.29	4.44		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	5.47	10.3		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.775	4.36		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	3.05	15.1		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	27.5	187		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	0.497	2.15		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.5*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.369		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.40	3.33		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	0.336	1.07		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	0.548	2.67		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	0.241	0.498		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	9.06	17.1		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	0.320	1.39		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.719	4.04		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	2.94	14.5		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	25.3	172		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.280	1.37		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	0.584	2.53		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*86.5*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.168		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	0.581	2.83		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	1.78	6.13		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	5.97	11.3		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.707	3.97		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	3.06	15.1		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	26.5	180		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*85.3*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.462		1	WG1828193

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG1828189
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1828189
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1828189
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1828189
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1828189
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1828189
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1828189
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1828189
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1828189
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1828189
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1828189
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1828189
Chloroform	67-66-3	119	0.200	0.973	0.563	2.74		1	WG1828189
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1828189
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1828189
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1828189
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1828189
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1828189
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1828189
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1828189
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1828189
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1828189
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1828189
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1828189
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1828189
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1828189
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1828189
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1828189
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1828189
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1828189
Ethanol	64-17-5	46.10	1.25	2.36	2.71	5.11		1	WG1828189
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1828189
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1828189
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.775	4.36		1	WG1828189
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	3.85	19.0		1	WG1828189
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1828189
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1828189
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1828189
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1828189
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1828189
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1828189
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1828189
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1828189
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1828189
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1828189
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1828189
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1828189
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1828189
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1828189
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1828189
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1828189
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1828189
Tetrachloroethylene	127-18-4	166	0.200	1.36	53.0	360		1	WG1828189
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1828189
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1828189
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1828189

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1828189
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1828189
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1828189
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1828189
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1828189
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1828189
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1828189
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1828189
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1828189
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1828189
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1828189
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*84.5*				WG1828189

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.447		1	WG1828193

Method Blank (MB)

(MB) R3767471-3 03/06/22 12:35

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

Method Blank (MB)

(MB) R3767471-3 03/06/22 12:35

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.142	J	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	*84.7*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3767471-1 03/06/22 09:34 • (LCSD) R3767471-2 03/06/22 11:52

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.79	3.77	101	101	70.0-130			0.529	25
Allyl Chloride	3.75	3.43	3.51	91.5	93.6	70.0-130			2.31	25
Benzene	3.75	4.04	4.01	108	107	70.0-130			0.745	25
Benzyl Chloride	3.75	3.73	3.73	99.5	99.5	70.0-152			0.000	25
Bromodichloromethane	3.75	3.86	3.84	103	102	70.0-130			0.519	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3767471-1 03/06/22 09:34 • (LCSD) R3767471-2 03/06/22 11:52

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	3.74	3.67	99.7	97.9	70.0-130			1.89	25
Bromomethane	3.75	3.94	3.39	105	90.4	70.0-130			15.0	25
1,3-Butadiene	3.75	3.57	3.38	95.2	90.1	70.0-130			5.47	25
Carbon disulfide	3.75	3.54	3.60	94.4	96.0	70.0-130			1.68	25
Carbon tetrachloride	3.75	3.82	3.86	102	103	70.0-130			1.04	25
Chlorobenzene	3.75	4.14	4.13	110	110	70.0-130			0.242	25
Chloroethane	3.75	3.77	3.32	101	88.5	70.0-130			12.7	25
Chloroform	3.75	3.78	3.78	101	101	70.0-130			0.000	25
Chloromethane	3.75	3.95	4.01	105	107	70.0-130			1.51	25
2-Chlorotoluene	3.75	3.86	3.85	103	103	70.0-130			0.259	25
Cyclohexane	3.75	4.01	4.03	107	107	70.0-130			0.498	25
Dibromochloromethane	3.75	4.00	3.95	107	105	70.0-130			1.26	25
1,2-Dibromoethane	3.75	4.05	3.99	108	106	70.0-130			1.49	25
1,2-Dichlorobenzene	3.75	4.00	3.82	107	102	70.0-130			4.60	25
1,3-Dichlorobenzene	3.75	3.99	3.94	106	105	70.0-130			1.26	25
1,4-Dichlorobenzene	3.75	4.05	3.99	108	106	70.0-130			1.49	25
1,2-Dichloroethane	3.75	3.93	3.94	105	105	70.0-130			0.254	25
1,1-Dichloroethane	3.75	3.60	3.62	96.0	96.5	70.0-130			0.554	25
1,1-Dichloroethene	3.75	3.72	3.71	99.2	98.9	70.0-130			0.269	25
cis-1,2-Dichloroethene	3.75	3.55	3.64	94.7	97.1	70.0-130			2.50	25
trans-1,2-Dichloroethene	3.75	3.62	3.64	96.5	97.1	70.0-130			0.551	25
1,2-Dichloropropane	3.75	3.94	3.87	105	103	70.0-130			1.79	25
cis-1,3-Dichloropropene	3.75	3.87	3.86	103	103	70.0-130			0.259	25
trans-1,3-Dichloropropene	3.75	3.72	3.73	99.2	99.5	70.0-130			0.268	25
1,4-Dioxane	3.75	3.94	3.87	105	103	70.0-140			1.79	25
Ethanol	3.75	3.47	3.41	92.5	90.9	55.0-148			1.74	25
Ethylbenzene	3.75	3.83	3.80	102	101	70.0-130			0.786	25
4-Ethyltoluene	3.75	3.84	3.79	102	101	70.0-130			1.31	25
Trichlorofluoromethane	3.75	3.74	3.56	99.7	94.9	70.0-130			4.93	25
Dichlorodifluoromethane	3.75	3.97	4.01	106	107	64.0-139			1.00	25
1,1,2-Trichlorotrifluoroethane	3.75	4.00	3.83	107	102	70.0-130			4.34	25
1,2-Dichlorotetrafluoroethane	3.75	4.03	4.16	107	111	70.0-130			3.17	25
Heptane	3.75	3.06	2.99	81.6	79.7	70.0-130			2.31	25
Hexachloro-1,3-butadiene	3.75	4.00	4.05	107	108	70.0-151			1.24	25
n-Hexane	3.75	3.63	3.62	96.8	96.5	70.0-130			0.276	25
Isopropylbenzene	3.75	3.91	3.88	104	103	70.0-130			0.770	25
Methylene Chloride	3.75	3.57	3.52	95.2	93.9	70.0-130			1.41	25
Methyl Butyl Ketone	3.75	4.01	3.92	107	105	70.0-149			2.27	25
Methyl Ethyl Ketone	3.75	3.76	3.82	100	102	70.0-130			1.58	25
4-Methyl-2-pentanone (MIBK)	3.75	3.84	3.74	102	99.7	70.0-139			2.64	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3767471-1 03/06/22 09:34 • (LCSD) R3767471-2 03/06/22 11:52

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methyl Methacrylate	3.75	3.76	3.75	100	100	70.0-130			0.266	25
MTBE	3.75	3.71	3.73	98.9	99.5	70.0-130			0.538	25
Naphthalene	3.75	3.32	3.44	88.5	91.7	70.0-159			3.55	25
2-Propanol	3.75	3.56	3.47	94.9	92.5	70.0-139			2.56	25
Propene	3.75	3.41	3.53	90.9	94.1	64.0-144			3.46	25
Styrene	3.75	4.03	3.97	107	106	70.0-130			1.50	25
1,1,2,2-Tetrachloroethane	3.75	3.70	3.68	98.7	98.1	70.0-130			0.542	25
Tetrachloroethylene	3.75	4.18	4.28	111	114	70.0-130			2.36	25
Tetrahydrofuran	3.75	3.59	3.69	95.7	98.4	70.0-137			2.75	25
Toluene	3.75	4.05	4.01	108	107	70.0-130			0.993	25
1,2,4-Trichlorobenzene	3.75	3.22	3.38	85.9	90.1	70.0-160			4.85	25
1,1,1-Trichloroethane	3.75	3.78	3.82	101	102	70.0-130			1.05	25
1,1,2-Trichloroethane	3.75	3.97	3.95	106	105	70.0-130			0.505	25
Trichloroethylene	3.75	4.02	3.99	107	106	70.0-130			0.749	25
1,2,4-Trimethylbenzene	3.75	3.93	3.86	105	103	70.0-130			1.80	25
1,3,5-Trimethylbenzene	3.75	3.95	3.88	105	103	70.0-130			1.79	25
2,2,4-Trimethylpentane	3.75	3.79	3.82	101	102	70.0-130			0.788	25
Vinyl chloride	3.75	3.90	3.68	104	98.1	70.0-130			5.80	25
Vinyl Bromide	3.75	3.93	3.39	105	90.4	70.0-130			14.8	25
Vinyl acetate	3.75	2.83	2.96	75.5	78.9	70.0-130			4.49	25
m&p-Xylene	7.50	7.84	7.69	105	103	70.0-130			1.93	25
o-Xylene	3.75	3.86	3.81	103	102	70.0-130			1.30	25
(S) 1,4-Bromofluorobenzene				*90.1*	*89.9*	*60.0-140*				

Method Blank (MB)

(MB) R3766879-3 03/06/22 11:20

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Helium	U		0.0259	0.100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3766879-1 03/06/22 11:13 • (LCSD) R3766879-2 03/06/22 11:17

Analyte	Spike Amount %	LCS Result %	LCSD Result %	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Helium	2.50	2.42	2.41	96.8	96.4	70.0-130			0.414	25

Method Blank (MB)

(MB) R3767923-3 03/09/22 11:03

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Helium	U		0.0259	0.100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3767923-1 03/09/22 10:51 • (LCSD) R3767923-2 03/09/22 10:56

Analyte	Spike Amount %	LCS Result %	LCSD Result %	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Helium	2.50	2.50	2.48	100	99.2	70.0-130			0.803	25

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Company Name/Address:
RMD Environmental - Walnut Creek, CA

1371 Oakland Blvd.

Suite 200

Billing Information:
Accounts Payable
1371 Oakland Blvd.

Suite 200
Walnut Creek, CA 94596

Report To:
Ivy Inouye

Email To:
iinouye@rmdes.net;emale@rmdes.net

Project Description: Police Credit Union

City/State Collected: SAN FRANCISCO, CA

Please Circle: PT MT CT ET

Phone: 925-683-8177

Client Project # 01-DTSC-007

Lab Project # RMDENVPHCA-01DTSC007

Collected by (print): B.ANGULO / E.MALE

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Three Day
___ Next Day X Five Day
___ Two Day STANDARD TAT

Date Results Needed

Chain of Custody Page 1 of 2

Pace PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1468315

D244

Acctnum: RMDENVPHCA
Template: T203474
Prelogin: P904064
PM: 942 - Jordan N Zito
PB: CW 02/17/22
Shipped Via: FedEX Ground

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	HELIUM Summa	TO-15 Summa			Rem./Contaminant	Sample # (lab only)
VP-127-1	7638	6818	3-4-22	1105	-28.5	-5	X	X				-01
SVP-28A	8486	11478	3-3-22	1559	-29	-4						-02
SVP-28B	9316	11766	3-3-22	1426	-29	-5						-03
SVP-29A	9369	11163	3-4-22	1225	-30	-4						-04
SVP-29B	~~70~~ 7904	11476		1249	-29	-5						-05
SVP-30A	7374	7860		1328	-28	-4						-06
SVP-30A-DUP	12407	11487		1328	-29	-5						-07
SVP-30B	10690	20684		1359	-29	-4						-08
SVP-31A	11844	011125	3-2-22	1402	-29	-4						-09
SVP-31B	8905	6814		1440	-29	-5						-10

Remarks: 1St2empty 5349 7820 1495/1473/

Samples returned via: __ UPS __ FedEx __ Courier ______

Tracking # 1510/1500/1462

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	3-4-22	1500			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) DRumsky	Date: 3-5-22	Time: 930

Condition: (lab use only) Amb

COC Seal Intact: ___ Y ___ N _X_ NA

NCF:

Company Name/Address:
RMD Environmental - Walnut Creek, CA

1371 Oakland Blvd.

Suite 200

Billing Information:
Accounts Payable
1371 Oakland Blvd.

Suite 200
Walnut Creek, CA 94596

Report To:
Ivy Inouye

Email To:
iinouye@rmdes.net;emale@rmdes.net

Project Description: Police Credit Union

City/State Collected: SAN FRANCISCO, CA

Please Circle: PT MT CT ET

Phone: 925-683-8177

Client Project # 01-DTSC-007

Lab Project # RMDENVPHCA-01DTSC007

Collected by (print): B. ANGULO / E. MALE

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
__ Same Day __ Three Day
__ Next Day X Five Day
__ Two Day
STANDARD TAT

Date Results Needed

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE
MT JULIET, TN

12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1468315

Table #

Acctnum: RMDENVPHCA
Template: T203474
Prelogin: P904064
PM: 942 - Jordan N Zito
PB: CSL 02/17/22
Shipped Via: FedEX Ground

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	HELIUM Summa	TO-15 Summa	Rem./Contaminant	Sample # (lab only)
SVP-32A	5706	7441	3-3-22	1331	-29	-4	X	X		-11
SVP-32B	21237	11471		1403	-28	-5				-12
SVP-33A	7364	11470		1450	-30	-5				-13
SVP-33A-DUP	6069	11488		1449	-28	-3				-14
SVP-33B	10415	11457		1523	-30	-5				-15

Sample Receipt Checklist
COC Seal Present/Intact: _Y _N
COC Signed/Accurate: _Y _N
Bottles arrive intact: _Y _N
Correct bottles used: _Y _N
Sufficient volume sent: _Y _N
RAD Screen <0.5 mR/hr: _Y _N
If Applicable
VOA Zero Headspace: _Y _N
Pres.Correct/Check: _Y _N

Remarks:

Samples returned via:
__ UPS __ FedEx __ Courier __

Tracking #

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	3-4-22	1500			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) D. Ramsey	3-5-22	930

Condition: (lab use only)
Amb

COC Seal Intact: __Y __N __NA

NCF:

03/05-L1468315-NCF RMDENVPHCA

R5

Time estimate: 0h **Time spent:** 0h

Members

Cole Medley (responsible) JZ Jordan Zito

Due on *9 March 2022 5:00 PM* for target *Done*

- [ ] Login Clarification needed
- [ ] Chain of custody is incomplete
- [ ] Please specify Metals requested
- [ ] Please specify TCLP requested
- [ ] Received additional samples not listed on COC
- [x] Sample IDs on containers do not match IDs on COC
- [ ] Client did not "X" analysis
- [ ] Chain of Custody is missing
- [ ] If no COC: Received by:________________
- [ ] If no COC: Date/Time:________________
- [ ] If no COC: Temp./Cont.Rec./pH:____________
- [ ] If no COC: Carrier:____________
- [ ] If no COC: Tracking #:____________
- [ ] Client informed by call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:________________
- [ ] PM initials:______________
- [ ] Client Contact:________________

Comments

Cole Medley *5 March 2022 4:39 PM*

SVP-30A-DUP 03/04/22 1328 (COC) =SVP-28A-DUP 03/04/22 1328 (Container)
Logged per COC.

Jordan Zito *7 March 2022 1:11 PM*

Correct as written on COC JZ

Troy Dunlap *7 March 2022 1:27 PM*

Done.

ANALYTICAL REPORT

March 10, 2022

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

RMD Environmental - Walnut Creek, CA

Sample Delivery Group:	L1468285
Samples Received:	03/05/2022
Project Number:	01-DTSC-007
Description:	Police Credit Union
Report To:	Ivy Inouye 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596

Entire Report Reviewed By:

Jordan N Zito
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

			Collected by	Collected date/time	Received date/time	
IAQ-1271-1 L1468285-01 Air			EM/BA	03/04/22 07:49	03/05/22 09:30	

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828118	1	03/06/22 19:19	03/06/22 19:19	CAW	Mt. Juliet, TN

			Collected by	Collected date/time	Received date/time	
IAQ-1271-1-DUP L1468285-02 Air			EM/BA	03/04/22 07:49	03/05/22 09:30	

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828118	1	03/06/22 19:57	03/06/22 19:57	CAW	Mt. Juliet, TN

			Collected by	Collected date/time	Received date/time	
IAQ-1271-2 L1468285-03 Air			EM/BA	03/04/22 07:47	03/05/22 09:30	

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828118	1	03/06/22 20:34	03/06/22 20:34	CAW	Mt. Juliet, TN

			Collected by	Collected date/time	Received date/time	
IAQ-1271-3 L1468285-04 Air			EM/BA	03/04/22 07:43	03/05/22 09:30	

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828118	1	03/06/22 21:12	03/06/22 21:12	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1829622	1	03/09/22 15:23	03/09/22 15:23	DAH	Mt. Juliet, TN

			Collected by	Collected date/time	Received date/time	
OAA-4 L1468285-05 Air			EM/BA	03/04/22 07:54	03/05/22 09:30	

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828118	1	03/06/22 21:50	03/06/22 21:50	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1829622	1	03/09/22 16:01	03/09/22 16:01	DAH	Mt. Juliet, TN

			Collected by	Collected date/time	Received date/time	
IAQ-1281-2 L1468285-06 Air			EM/BA	03/04/22 08:57	03/05/22 09:30	

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828118	1	03/06/22 22:27	03/06/22 22:27	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1829622	1	03/09/22 16:39	03/09/22 16:39	DAH	Mt. Juliet, TN

			Collected by	Collected date/time	Received date/time	
IAQ-1281-1 L1468285-07 Air			EM/BA	03/04/22 09:02	03/05/22 09:30	

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828118	1	03/06/22 23:05	03/06/22 23:05	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1829622	1	03/09/22 17:17	03/09/22 17:17	DAH	Mt. Juliet, TN

			Collected by	Collected date/time	Received date/time	
IAQ-1280-1 L1468285-08 Air			EM/BA	03/04/22 09:35	03/05/22 09:30	

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828118	1	03/06/22 23:43	03/06/22 23:43	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1829622	1	03/09/22 17:55	03/09/22 17:55	DAH	Mt. Juliet, TN

IAQ-1280-2 L1468285-09 Air

Collected by	Collected date/time	Received date/time
EM/BA	03/04/22 09:31	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828118	1	03/07/22 00:21	03/07/22 00:21	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1829622	1	03/09/22 18:33	03/09/22 18:33	DAH	Mt. Juliet, TN

IAQ-1284-1 L1468285-10 Air

Collected by	Collected date/time	Received date/time
EM/BA	03/04/22 09:19	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828611	1	03/07/22 15:12	03/07/22 15:12	CAW	Mt. Juliet, TN

IAQ-1284-2 L1468285-11 Air

Collected by	Collected date/time	Received date/time
EM/BA	03/04/22 09:14	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828611	1	03/07/22 15:49	03/07/22 15:49	CAW	Mt. Juliet, TN

OAA-5 L1468285-12 Air

Collected by	Collected date/time	Received date/time
EM/BA	03/04/22 09:23	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828611	1	03/07/22 16:27	03/07/22 16:27	CAW	Mt. Juliet, TN

IAQ-1276-1 L1468285-13 Air

Collected by	Collected date/time	Received date/time
EM/BA	03/04/22 09:53	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828611	1	03/07/22 17:05	03/07/22 17:05	CAW	Mt. Juliet, TN

IAQ-1276-2 L1468285-14 Air

Collected by	Collected date/time	Received date/time
EM/BA	03/04/22 09:51	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828611	1	03/07/22 17:43	03/07/22 17:43	CAW	Mt. Juliet, TN

IAQ-1275-1 L1468285-15 Air

Collected by	Collected date/time	Received date/time
EM/BA	03/04/22 11:28	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828611	1	03/07/22 18:21	03/07/22 18:21	CAW	Mt. Juliet, TN

IAQ-1275-2 L1468285-16 Air

Collected by	Collected date/time	Received date/time
EM/BA	03/04/22 11:26	03/05/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG1828611	1	03/07/22 19:00	03/07/22 19:00	CAW	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jordan N Zito
Project Manager

Volatile Organic Compounds (MS) by Method TO-15-SIM

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG1828611	Benzene	L1468285-10, 11, 12, 13, 14
WG1829622	1,4-Dichlorobenzene	L1468285-04, 05, 06, 08, 09

The associated batch QC was above the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG1828118	(LCS) R3767350-1, (LCSD) R3767350-2, L1468285-01, 02, 03	1,4-Dichlorobenzene
WG1828611	(LCS) R3767358-1, (LCSD) R3767358-2, L1468285-10, 11, 12, 13, 14, 15, 16	1,4-Dichlorobenzene

Volatile Organic Compounds (MS) by Method TO-15-SIM

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
IAQ-1271-1	L1468285-01	Benzene	71-43-2	78.10	0.0200	0.0639	0.163	0.521		1	WG1828118
IAQ-1271-1	L1468285-01	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0892	0.562		1	WG1828118
IAQ-1271-1	L1468285-01	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.712	1.47		1	WG1828118
IAQ-1271-1	L1468285-01	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	2.00	8.10		1	WG1828118
IAQ-1271-1	L1468285-01	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0469	0.203		1	WG1828118
IAQ-1271-1	L1468285-01	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0259	0.176		1	WG1828118
IAQ-1271-1-DUP	L1468285-02	Benzene	71-43-2	78.10	0.0200	0.0639	0.118	0.377		1	WG1828118
IAQ-1271-1-DUP	L1468285-02	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0934	0.588		1	WG1828118
IAQ-1271-1-DUP	L1468285-02	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.719	1.49		1	WG1828118
IAQ-1271-1-DUP	L1468285-02	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	1.90	7.69		1	WG1828118
IAQ-1271-1-DUP	L1468285-02	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0423	0.183		1	WG1828118
IAQ-1271-1-DUP	L1468285-02	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0244	0.166		1	WG1828118
IAQ-1271-2	L1468285-03	Benzene	71-43-2	78.10	0.0200	0.0639	0.119	0.380		1	WG1828118
IAQ-1271-2	L1468285-03	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0887	0.559		1	WG1828118
IAQ-1271-2	L1468285-03	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.718	1.48		1	WG1828118
IAQ-1271-2	L1468285-03	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.302	1.22		1	WG1828118
IAQ-1271-2	L1468285-03	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0455	0.197		1	WG1828118
IAQ-1271-2	L1468285-03	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0326	0.221		1	WG1828118
IAQ-1271-3	L1468285-04	Benzene	71-43-2	78.10	0.0200	0.0639	0.163	0.521		1	WG1828118
IAQ-1271-3	L1468285-04	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0889	0.560		1	WG1828118
IAQ-1271-3	L1468285-04	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.796	1.64		1	WG1828118
IAQ-1271-3	L1468285-04	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0861	0.518	B	1	WG1829622
IAQ-1271-3	L1468285-04	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.265	1.07		1	WG1828118
IAQ-1271-3	L1468285-04	Ethylbenzene	100-41-4	106	0.0300	0.130	0.114	0.494		1	WG1828118
IAQ-1271-3	L1468285-04	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0265	0.180		1	WG1828118
OAA-4	L1468285-05	Benzene	71-43-2	78.10	0.0200	0.0639	0.0967	0.309		1	WG1828118
OAA-4	L1468285-05	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0852	0.537		1	WG1828118
OAA-4	L1468285-05	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.612	1.26		1	WG1828118
OAA-4	L1468285-05	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0590	0.355	B	1	WG1829622
IAQ-1281-2	L1468285-06	Benzene	71-43-2	78.10	0.0200	0.0639	0.159	0.508		1	WG1828118
IAQ-1281-2	L1468285-06	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.100	0.630		1	WG1828118
IAQ-1281-2	L1468285-06	Chloromethane	74-87-3	50.50	0.0300	0.0620	1.03	2.13		1	WG1828118
IAQ-1281-2	L1468285-06	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0459	0.276	B	1	WG1829622
IAQ-1281-2	L1468285-06	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0812	0.352		1	WG1828118
IAQ-1281-2	L1468285-06	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0477	0.324		1	WG1828118
IAQ-1281-2	L1468285-06	Trichloroethylene	79-01-6	131	0.0200	0.107	1.02	5.47		1	WG1828118
IAQ-1281-1	L1468285-07	Benzene	71-43-2	78.10	0.0200	0.0639	0.227	0.725		1	WG1828118
IAQ-1281-1	L1468285-07	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0903	0.569		1	WG1828118
IAQ-1281-1	L1468285-07	Chloromethane	74-87-3	50.50	0.0300	0.0620	1.21	2.50		1	WG1828118
IAQ-1281-1	L1468285-07	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.101	0.607		1	WG1829622
IAQ-1281-1	L1468285-07	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0747	0.324		1	WG1828118
IAQ-1281-1	L1468285-07	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.181	1.23		1	WG1828118
IAQ-1281-1	L1468285-07	1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	0.290	1.58		1	WG1828118
IAQ-1280-1	L1468285-08	Benzene	71-43-2	78.10	0.0200	0.0639	0.598	1.91		1	WG1828118
IAQ-1280-1	L1468285-08	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0941	0.593		1	WG1828118
IAQ-1280-1	L1468285-08	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.811	1.68		1	WG1828118
IAQ-1280-1	L1468285-08	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0274	0.165	B	1	WG1829622
IAQ-1280-1	L1468285-08	Ethylbenzene	100-41-4	106	0.0300	0.130	0.202	0.876		1	WG1828118
IAQ-1280-1	L1468285-08	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0598	0.406		1	WG1828118
IAQ-1280-2	L1468285-09	Benzene	71-43-2	78.10	0.0200	0.0639	0.513	1.64		1	WG1828118
IAQ-1280-2	L1468285-09	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0917	0.578		1	WG1828118
IAQ-1280-2	L1468285-09	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.926	1.91		1	WG1828118
IAQ-1280-2	L1468285-09	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0453	0.272	B	1	WG1829622
IAQ-1280-2	L1468285-09	Ethylbenzene	100-41-4	106	0.0300	0.130	0.185	0.802		1	WG1828118
IAQ-1280-2	L1468285-09	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0509	0.346		1	WG1828118

Volatile Organic Compounds (MS) by Method TO-15-SIM

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
IAQ-1284-1	L1468285-10	Benzene	71-43-2	78.10	0.0200	0.0639	0.125	0.399	B	1	WG1828611
IAQ-1284-1	L1468285-10	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0947	0.596		1	WG1828611
IAQ-1284-1	L1468285-10	Chloroform	67-66-3	119	0.0200	0.0973	0.337	1.64		1	WG1828611
IAQ-1284-1	L1468285-10	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.783	1.62		1	WG1828611
IAQ-1284-1	L1468285-10	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0262	0.158	J4	1	WG1828611
IAQ-1284-1	L1468285-10	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.128	0.518		1	WG1828611
IAQ-1284-1	L1468285-10	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0981	0.425		1	WG1828611
IAQ-1284-1	L1468285-10	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.144	0.978		1	WG1828611
IAQ-1284-1	L1468285-10	1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	0.0227	0.123		1	WG1828611
IAQ-1284-2	L1468285-11	Benzene	71-43-2	78.10	0.0200	0.0639	0.118	0.377	B	1	WG1828611
IAQ-1284-2	L1468285-11	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0892	0.562		1	WG1828611
IAQ-1284-2	L1468285-11	Chloroform	67-66-3	119	0.0200	0.0973	0.114	0.555		1	WG1828611
IAQ-1284-2	L1468285-11	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.720	1.49		1	WG1828611
IAQ-1284-2	L1468285-11	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0784	0.317		1	WG1828611
IAQ-1284-2	L1468285-11	Ethylbenzene	100-41-4	106	0.0300	0.130	0.116	0.503		1	WG1828611
IAQ-1284-2	L1468285-11	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0766	0.520		1	WG1828611
OAA-5	L1468285-12	Benzene	71-43-2	78.10	0.0200	0.0639	0.125	0.399	B	1	WG1828611
OAA-5	L1468285-12	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0867	0.546		1	WG1828611
OAA-5	L1468285-12	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.633	1.31		1	WG1828611
OAA-5	L1468285-12	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0764	0.519		1	WG1828611
IAQ-1276-1	L1468285-13	Benzene	71-43-2	78.10	0.0200	0.0639	0.130	0.415	B	1	WG1828611
IAQ-1276-1	L1468285-13	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.143	0.901		1	WG1828611
IAQ-1276-1	L1468285-13	Chloroform	67-66-3	119	0.0200	0.0973	1.16	5.65		1	WG1828611
IAQ-1276-1	L1468285-13	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.955	1.97		1	WG1828611
IAQ-1276-1	L1468285-13	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0802	0.325		1	WG1828611
IAQ-1276-1	L1468285-13	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0363	0.157		1	WG1828611
IAQ-1276-1	L1468285-13	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.281	1.91		1	WG1828611
IAQ-1276-2	L1468285-14	Benzene	71-43-2	78.10	0.0200	0.0639	0.141	0.450	B	1	WG1828611
IAQ-1276-2	L1468285-14	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.117	0.737		1	WG1828611
IAQ-1276-2	L1468285-14	Chloroform	67-66-3	119	0.0200	0.0973	0.698	3.40		1	WG1828611
IAQ-1276-2	L1468285-14	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.931	1.92		1	WG1828611
IAQ-1276-2	L1468285-14	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0656	0.266		1	WG1828611
IAQ-1276-2	L1468285-14	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0601	0.261		1	WG1828611
IAQ-1276-2	L1468285-14	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0242	0.164		1	WG1828611
IAQ-1275-1	L1468285-15	Benzene	71-43-2	78.10	0.0200	0.0639	0.333	1.06		1	WG1828611
IAQ-1275-1	L1468285-15	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0923	0.581		1	WG1828611
IAQ-1275-1	L1468285-15	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.721	1.49		1	WG1828611
IAQ-1275-1	L1468285-15	Ethylbenzene	100-41-4	106	0.0300	0.130	0.166	0.720		1	WG1828611
IAQ-1275-1	L1468285-15	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.296	2.01		1	WG1828611
IAQ-1275-2	L1468285-16	Benzene	71-43-2	78.10	0.0200	0.0639	0.365	1.17		1	WG1828611
IAQ-1275-2	L1468285-16	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0920	0.579		1	WG1828611
IAQ-1275-2	L1468285-16	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.871	1.80		1	WG1828611
IAQ-1275-2	L1468285-16	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0527	0.213		1	WG1828611
IAQ-1275-2	L1468285-16	Ethylbenzene	100-41-4	106	0.0300	0.130	0.170	0.737		1	WG1828611
IAQ-1275-2	L1468285-16	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.176	1.19		1	WG1828611

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.163	0.521		1	WG1828118
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0892	0.562		1	WG1828118
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828118
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828118
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.712	1.47		1	WG1828118
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828118
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND	J4	1	WG1828118
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828118
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	2.00	8.10		1	WG1828118
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828118
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828118
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828118
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828118
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828118
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828118
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0469	0.203		1	WG1828118
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828118
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0259	0.176		1	WG1828118
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828118
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828118
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828118
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828118
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*110*				WG1828118

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.118	0.377		1	WG1828118
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0934	0.588		1	WG1828118
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828118
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828118
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.719	1.49		1	WG1828118
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828118
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND	J4	1	WG1828118
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828118
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	1.90	7.69		1	WG1828118
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828118
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828118
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828118
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828118
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828118
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828118
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0423	0.183		1	WG1828118
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828118
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0244	0.166		1	WG1828118
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828118
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828118
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828118
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828118
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*109*				WG1828118

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.119	0.380		1	WG1828118
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0887	0.559		1	WG1828118
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828118
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828118
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.718	1.48		1	WG1828118
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828118
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND	J4	1	WG1828118
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828118
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.302	1.22		1	WG1828118
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828118
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828118
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828118
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828118
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828118
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828118
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0455	0.197		1	WG1828118
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828118
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0326	0.221		1	WG1828118
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828118
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828118
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828118
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828118
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*107*				WG1828118

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.163	0.521		1	WG1828118
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0889	0.560		1	WG1828118
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828118
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828118
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.796	1.64		1	WG1828118
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828118
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0861	0.518	B	1	WG1829622
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828118
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.265	1.07		1	WG1828118
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828118
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828118
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828118
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828118
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828118
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828118
Ethylbenzene	100-41-4	106	0.0300	0.130	0.114	0.494		1	WG1828118
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828118
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0265	0.180		1	WG1828118
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828118
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828118
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828118
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828118
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*107*				WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*110*				WG1829622

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.0967	0.309		1	WG1828118
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0852	0.537		1	WG1828118
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828118
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828118
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.612	1.26		1	WG1828118
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828118
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0590	0.355	B	1	WG1829622
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828118
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1828118
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828118
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828118
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828118
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828118
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828118
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828118
Ethylbenzene	100-41-4	106	0.0300	0.130	ND	ND		1	WG1828118
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828118
Tetrachloroethylene	127-18-4	166	0.0200	0.136	ND	ND		1	WG1828118
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828118
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828118
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828118
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828118
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*105*				WG1829622

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.159	0.508		1	WG1828118
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.100	0.630		1	WG1828118
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828118
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828118
Chloromethane	74-87-3	50.50	0.0300	0.0620	1.03	2.13		1	WG1828118
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828118
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0459	0.276	B	1	WG1829622
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828118
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1828118
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828118
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828118
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828118
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828118
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828118
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828118
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0812	0.352		1	WG1828118
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828118
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0477	0.324		1	WG1828118
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828118
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828118
Trichloroethylene	79-01-6	131	0.0200	0.107	1.02	5.47		1	WG1828118
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828118
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*105*				WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*108*				WG1829622

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.227	0.725		1	WG1828118
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0903	0.569		1	WG1828118
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828118
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828118
Chloromethane	74-87-3	50.50	0.0300	0.0620	1.21	2.50		1	WG1828118
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828118
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.101	0.607		1	WG1829622
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828118
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1828118
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828118
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828118
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828118
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828118
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828118
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828118
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0747	0.324		1	WG1828118
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828118
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.181	1.23		1	WG1828118
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	0.290	1.58		1	WG1828118
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828118
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828118
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828118
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*106*				WG1829622

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.598	1.91		1	WG1828118
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0941	0.593		1	WG1828118
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828118
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828118
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.811	1.68		1	WG1828118
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828118
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0274	0.165	B	1	WG1829622
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828118
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1828118
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828118
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828118
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828118
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828118
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828118
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828118
Ethylbenzene	100-41-4	106	0.0300	0.130	0.202	0.876		1	WG1828118
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828118
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0598	0.406		1	WG1828118
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828118
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828118
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828118
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828118
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*109*				WG1829622

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.513	1.64		1	WG1828118
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0917	0.578		1	WG1828118
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828118
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828118
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.926	1.91		1	WG1828118
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828118
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0453	0.272	B	1	WG1829622
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828118
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1828118
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828118
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828118
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828118
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828118
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828118
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828118
Ethylbenzene	100-41-4	106	0.0300	0.130	0.185	0.802		1	WG1828118
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828118
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0509	0.346		1	WG1828118
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828118
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828118
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828118
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828118
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*109*				WG1828118
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*112*				WG1829622

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.125	0.399	B	1	WG1828611
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0947	0.596		1	WG1828611
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828611
Chloroform	67-66-3	119	0.0200	0.0973	0.337	1.64		1	WG1828611
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.783	1.62		1	WG1828611
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828611
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0262	0.158	J4	1	WG1828611
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828611
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.128	0.518		1	WG1828611
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828611
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828611
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828611
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828611
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828611
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828611
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0981	0.425		1	WG1828611
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828611
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.144	0.978		1	WG1828611
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	0.0227	0.123		1	WG1828611
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828611
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828611
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828611
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828611
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*109*				WG1828611

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.118	0.377	B	1	WG1828611
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0892	0.562		1	WG1828611
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828611
Chloroform	67-66-3	119	0.0200	0.0973	0.114	0.555		1	WG1828611
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.720	1.49		1	WG1828611
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828611
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND	J4	1	WG1828611
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828611
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0784	0.317		1	WG1828611
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828611
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828611
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828611
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828611
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828611
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828611
Ethylbenzene	100-41-4	106	0.0300	0.130	0.116	0.503		1	WG1828611
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828611
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0766	0.520		1	WG1828611
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828611
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828611
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828611
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828611
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828611
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*106*				WG1828611

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.125	0.399	B	1	WG1828611
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0867	0.546		1	WG1828611
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828611
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828611
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.633	1.31		1	WG1828611
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828611
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND	J4	1	WG1828611
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828611
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1828611
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828611
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828611
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828611
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828611
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828611
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828611
Ethylbenzene	100-41-4	106	0.0300	0.130	ND	ND		1	WG1828611
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828611
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0764	0.519		1	WG1828611
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828611
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828611
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828611
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828611
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828611
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1828611

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.130	0.415	B	1	WG1828611
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.143	0.901		1	WG1828611
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828611
Chloroform	67-66-3	119	0.0200	0.0973	1.16	5.65		1	WG1828611
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.955	1.97		1	WG1828611
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828611
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND	J4	1	WG1828611
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828611
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0802	0.325		1	WG1828611
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828611
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828611
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828611
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828611
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828611
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828611
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0363	0.157		1	WG1828611
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828611
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.281	1.91		1	WG1828611
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828611
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828611
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828611
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828611
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828611
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1828611

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.141	0.450	B	1	WG1828611
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.117	0.737		1	WG1828611
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828611
Chloroform	67-66-3	119	0.0200	0.0973	0.698	3.40		1	WG1828611
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.931	1.92		1	WG1828611
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828611
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND	J4	1	WG1828611
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828611
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0656	0.266		1	WG1828611
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828611
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828611
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828611
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828611
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828611
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828611
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0601	0.261		1	WG1828611
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828611
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0242	0.164		1	WG1828611
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828611
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828611
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828611
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828611
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828611
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG1828611

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.333	1.06		1	WG1828611
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0923	0.581		1	WG1828611
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828611
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828611
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.721	1.49		1	WG1828611
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828611
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND	J4	1	WG1828611
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828611
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG1828611
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828611
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828611
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828611
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828611
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828611
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828611
Ethylbenzene	100-41-4	106	0.0300	0.130	0.166	0.720		1	WG1828611
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828611
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.296	2.01		1	WG1828611
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828611
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828611
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828611
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828611
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828611
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG1828611

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.365	1.17		1	WG1828611
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0920	0.579		1	WG1828611
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG1828611
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG1828611
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.871	1.80		1	WG1828611
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG1828611
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND	J4	1	WG1828611
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG1828611
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0527	0.213		1	WG1828611
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG1828611
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG1828611
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG1828611
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG1828611
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG1828611
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG1828611
Ethylbenzene	100-41-4	106	0.0300	0.130	0.170	0.737		1	WG1828611
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG1828611
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.176	1.19		1	WG1828611
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG1828611
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG1828611
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG1828611
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG1828611
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG1828611
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*105*				WG1828611

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3767350-3 03/06/22 10:38

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Benzene	U		0.0112	0.0200
Carbon tetrachloride	U		0.00995	0.0200
Chloroethane	U		0.00944	0.0400
Chloroform	U		0.00729	0.0200
Chloromethane	U		0.0162	0.0300
1,2-Dibromoethane	U		0.00779	0.0200
1,4-Dichlorobenzene	U		0.00691	0.0200
1,1-Dichloroethane	U		0.00893	0.0200
1,2-Dichloroethane	U		0.000471	0.0200
1,1-Dichloroethene	U		0.00921	0.0200
cis-1,2-Dichloroethene	U		0.0142	0.0200
trans-1,2-Dichloroethene	U		0.00499	0.0200
1,2-Dichloropropane	U		0.00885	0.0300
cis-1,3-Dichloropropene	U		0.00735	0.0200
trans-1,3-Dichloropropene	U		0.00711	0.0300
Ethylbenzene	U		0.0126	0.0300
1,1,2,2-Tetrachloroethane	U		0.00874	0.0200
Tetrachloroethylene	U		0.0127	0.0200
1,1,1-Trichloroethane	U		0.00649	0.0200
1,1,2-Trichloroethane	U		0.00583	0.0300
Trichloroethylene	U		0.00746	0.0200
Vinyl chloride	U		0.00765	0.0200
Vinyl acetate	U		0.0111	0.0200
(S) 1,4-Bromofluorobenzene	*94.1*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3767350-1 03/06/22 09:21 • (LCSD) R3767350-2 03/06/22 10:00

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.567	0.563	113	113	70.0-130			0.708	25
Carbon tetrachloride	0.500	0.591	0.589	118	118	70.0-130			0.339	25
Chloroethane	0.500	0.535	0.628	107	126	70.0-130			16.0	25
Chloroform	0.500	0.579	0.574	116	115	70.0-130			0.867	25
Chloromethane	0.500	0.565	0.565	113	113	70.0-130			0.000	25
1,2-Dibromoethane	0.500	0.585	0.580	117	116	70.0-130			0.858	25
1,4-Dichlorobenzene	0.500	0.681	0.681	136	136	70.0-130	J4	J4	0.000	25
1,1-Dichloroethane	0.500	0.576	0.571	115	114	70.0-130			0.872	25
1,2-Dichloroethane	0.500	0.598	0.589	120	118	70.0-130			1.52	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3767350-1 03/06/22 09:21 • (LCSD) R3767350-2 03/06/22 10:00

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.500	0.585	0.580	117	116	70.0-130			0.858	25
cis-1,2-Dichloroethene	0.500	0.532	0.525	106	105	70.0-130			1.32	25
trans-1,2-Dichloroethene	0.500	0.568	0.560	114	112	70.0-130			1.42	25
1,2-Dichloropropane	0.500	0.584	0.579	117	116	70.0-130			0.860	25
cis-1,3-Dichloropropene	0.500	0.579	0.572	116	114	70.0-130			1.22	25
trans-1,3-Dichloropropene	0.500	0.565	0.560	113	112	70.0-130			0.889	25
Ethylbenzene	0.500	0.579	0.590	116	118	70.0-130			1.88	25
1,1,2,2-Tetrachloroethane	0.500	0.578	0.579	116	116	70.0-130			0.173	25
Tetrachloroethylene	0.500	0.605	0.605	121	121	70.0-130			0.000	25
1,1,1-Trichloroethane	0.500	0.583	0.583	117	117	70.0-130			0.000	25
1,1,2-Trichloroethane	0.500	0.592	0.590	118	118	70.0-130			0.338	25
Trichloroethylene	0.500	0.597	0.593	119	119	70.0-130			0.672	25
Vinyl chloride	0.500	0.575	0.572	115	114	70.0-130			0.523	25
Vinyl acetate	0.500	0.551	0.548	110	110	70.0-130			0.546	25
(S) 1,4-Bromofluorobenzene				*98.6*	*100*	*60.0-140*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Method Blank (MB)

(MB) R3767358-3 03/07/22 11:02

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Benzene	0.0145	J	0.0112	0.0200
Carbon tetrachloride	U		0.00995	0.0200
Chloroethane	U		0.00944	0.0400
Chloroform	U		0.00729	0.0200
Chloromethane	U		0.0162	0.0300
1,2-Dibromoethane	U		0.00779	0.0200
1,4-Dichlorobenzene	U		0.00691	0.0200
1,1-Dichloroethane	U		0.00893	0.0200
1,2-Dichloroethane	U		0.000471	0.0200
1,1-Dichloroethene	U		0.00921	0.0200
cis-1,2-Dichloroethene	U		0.0142	0.0200
trans-1,2-Dichloroethene	U		0.00499	0.0200
1,2-Dichloropropane	U		0.00885	0.0300
cis-1,3-Dichloropropene	U		0.00735	0.0200
trans-1,3-Dichloropropene	U		0.00711	0.0300
Ethylbenzene	U		0.0126	0.0300
1,1,2,2-Tetrachloroethane	U		0.00874	0.0200
Tetrachloroethylene	U		0.0127	0.0200
1,1,1-Trichloroethane	U		0.00649	0.0200
1,1,2-Trichloroethane	U		0.00583	0.0300
Trichloroethylene	U		0.00746	0.0200
Vinyl chloride	U		0.00765	0.0200
Vinyl acetate	U		0.0111	0.0200
(S) 1,4-Bromofluorobenzene	*95.4*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3767358-1 03/07/22 09:44 • (LCSD) R3767358-2 03/07/22 10:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.554	0.570	111	114	70.0-130			2.85	25
Carbon tetrachloride	0.500	0.594	0.602	119	120	70.0-130			1.34	25
Chloroethane	0.500	0.589	0.546	118	109	70.0-130			7.58	25
Chloroform	0.500	0.581	0.581	116	116	70.0-130			0.000	25
Chloromethane	0.500	0.568	0.585	114	117	70.0-130			2.95	25
1,2-Dibromoethane	0.500	0.574	0.580	115	116	70.0-130			1.04	25
1,4-Dichlorobenzene	0.500	0.668	0.667	134	133	70.0-130	J4	J4	0.150	25
1,1-Dichloroethane	0.500	0.578	0.585	116	117	70.0-130			1.20	25
1,2-Dichloroethane	0.500	0.579	0.598	116	120	70.0-130			3.23	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3767358-1 03/07/22 09:44 • (LCSD) R3767358-2 03/07/22 10:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.500	0.595	0.603	119	121	70.0-130			1.34	25
cis-1,2-Dichloroethene	0.500	0.536	0.550	107	110	70.0-130			2.58	25
trans-1,2-Dichloroethene	0.500	0.570	0.580	114	116	70.0-130			1.74	25
1,2-Dichloropropane	0.500	0.570	0.574	114	115	70.0-130			0.699	25
cis-1,3-Dichloropropene	0.500	0.575	0.584	115	117	70.0-130			1.55	25
trans-1,3-Dichloropropene	0.500	0.566	0.563	113	113	70.0-130			0.531	25
Ethylbenzene	0.500	0.599	0.603	120	121	70.0-130			0.666	25
1,1,2,2-Tetrachloroethane	0.500	0.567	0.580	113	116	70.0-130			2.27	25
Tetrachloroethylene	0.500	0.592	0.602	118	120	70.0-130			1.68	25
1,1,1-Trichloroethane	0.500	0.591	0.591	118	118	70.0-130			0.000	25
1,1,2-Trichloroethane	0.500	0.575	0.577	115	115	70.0-130			0.347	25
Trichloroethylene	0.500	0.582	0.592	116	118	70.0-130			1.70	25
Vinyl chloride	0.500	0.582	0.588	116	118	70.0-130			1.03	25
Vinyl acetate	0.500	0.577	0.576	115	115	70.0-130			0.173	25
(S) 1,4-Bromofluorobenzene				*102*	*102*	*60.0-140*				

Method Blank (MB)

(MB) R3768319-3 03/09/22 10:53

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
1,4-Dichlorobenzene	0.00885	J	0.00691	0.0200
(S) 1,4-Bromofluorobenzene	*98.7*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3768319-1 03/09/22 09:28 • (LCSD) R3768319-2 03/09/22 10:07

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.500	0.482	0.482	96.4	96.4	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				*105*	*103*	*60.0-140*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:	Billing Information:	Analysis	Chain of Custody Page 1 of 2
RMD Environmental - Walnut Creek, CA 1371 Oakland Blvd. Suite 200	Accounts Payable 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596		Pace PEOPLE ADVANCING SCIENCE MT JULIET, TN 12065 Lebanon Road Mt Juliet, TN 37122 Phone: 615-758-5858 Alt: 800-767-5859 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf
Report To: Ivy Inouye	Email To: iinouye@rmdes.net;emale@rmdes.net		
Project Description: Police Credit Union	City/State Collected: SAN FRANCISCO, CA	Please Circle: PT MT CT ET	SDG # L1468285 D243
Phone: 925-683-8177	Client Project # 01-DTSC-007	Lab Project # RMDENVPHCA-01DTSC007	
Collected by (print): E. Male / B. Angulo	Site/Facility ID #	P.O. #	Acctnum: RMDENVPHCA
Collected by (signature): [signature]	Rush? (Lab MUST Be Notified) __ Same Day __ Next Day __ Two Day __ Three Day X Five Day STD TAT	Date Results Needed	Template: T204372 Prelogin: P908183 PM: 942 - Jordan N Zito PB: [illegible]
			Shipped Via: FedEX Ground

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	TO-15SIM Summa			Rem./Contaminant	Sample # (lab only)
IAQ-1271-1	10836	11387	~~3-3-22~~ 3-4-22	~~0806~~ 0749	~~3-4-22~~ -29	-6	X				-01
IAQ-1271-DUP	20364	9935	3-4-22	0749	-29.5	-4	↓				-02
IAQ-1271-2	11086	12022	3-4-22	0747	-29	-5					-03
IAQ-1271-3	21241	10033	3-4-22	0743	-29	-6					-04
OAA-4	11262	010034	3-4-22	0754	-28	-6					-05
IAQ-1281-2	9137	10064	3-4-22	0857	~~-3.5~~ -27	-3.5					-06
IAQ-1281-1	~~8037~~ 8043	5289	3-4-22	0902	-30	-7					-07
IAQ-1280-1	7304	9709	3-4-22	0935	-30	-7					-08
IAQ-1280-2	6944	100216	3-4-22	0931	-28	-4					-09
IAQ-1284-1	7984	11412	3-4-22	0919	-30	-6	↓				-10

Remarks: 16 L empty

Samples returned via: __ UPS __ FedEx __ Courier ____	Tracking # 5159/1521 5349 7820 5148/5181/5170	Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	Condition: (lab use only)
[signature]	3-4-22	1500				Amb
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	COC Seal Intact: __ Y __ N ✓ NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) D. Ramsey	Date: 3-5-22	Time: 930	NCF:

Company Name/Address: RMD Environmental - Walnut Creek, CA 1371 Oakland Blvd. Suite 200	Billing Information: Accounts Payable 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596	Chain of Custody Page 2 of 2
Report To: Ivy Inouye	Email To: iinouye@rmdes.net;emale@rmdes.net	Pace PEOPLE ADVANCING SCIENCE MT JULIET, TN 12065 Lebanon Road Mt Juliet, TN 37122 Phone: 615-758-5858 Alt: 800-767-5859 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf
Project Description: Police Credit Union	City/State Collected: SAN FRANCISCO, CA — Please Circle: PT MT CT ET	SDG # L1468285
Phone: 925-683-8177 — Client Project # 01-DTSC-007	Lab Project # RMDENVPHCA-01DTSC007	Table #
Collected by (print): B.ANGULO/E.MALE — Site/Facility ID #	P.O. #	Acctnum: RMDENVPHCA Template: T204372 Prelogin: P908183
Collected by (signature):	Rush? (Lab MUST Be Notified) ___ Same Day ___ Next Day ___ Two Day ___ Three Day X Five Day STD TAT — Date Results Needed	PM: 942 - Jordan N Zito PB: 3/03/22 Shipped Via: FedEX Ground

Analysis: TO-15SIM Summa

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	TO-15SIM Summa	Rem./Contaminant	Sample # (lab only)
IAQ-1284-2	10409	11396	3-4-22	0914	-28	0	X		-11
~~IAQ-128 OOA-5~~ OAA-5	10795	12023	3-4-22	0923	-29	-3	↓		-12
~~IAQ-1270-1~~ IAQ-1276-1	11192	5699	↓	0953	-30	-7	↓		-13
IAQ-1276-2	8022	7821	↓	0951	-30	-6	↓		-14
IAQ-1275-1	11132	10013	↓	1128	-27.5	-4	↓		-15
IAQ-1275-2	10822	5275	↓	1126	-30	-7	↓		-14

EM 3/4

Sample Receipt Checklist
COC Seal Present/Intact: _Y_ _N If Applicable
COC Signed/Accurate: _Y_ _N VOA Zero Headspace: _Y_ _N
Bottles arrive intact: _Y_ _N Pres.Correct/Check: _Y_ _N
Correct bottles used: _Y_ _N
Sufficient volume sent: _Y_ _N
RAD Screen <0.5 mR/hr: _Y_ _N

Remarks:

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	
Samples returned via: __ UPS __ FedEx __ Courier __				Tracking #		Hold #
[signature]	3-4-22	1500				Condition: (lab use only) Amb
						COC Seal Intact: ___Y ___N _X_NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) D. Ramsey	3-5-22	930	NCF:

Pace Analytical®

ANALYTICAL REPORT

February 09, 2023

1 Cp	2 Tc
3 Ss	4 Cn
5 Ds	6 Sr
7 Qc	8 Gl
9 Al	10 Sc

RMD Environmental - Walnut Creek, CA

Sample Delivery Group:	L1582381
Samples Received:	02/04/2023
Project Number:	01-DTSC-007
Description:	Police Credit Union
Report To:	Ivy Inouye 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596

Entire Report Reviewed By: Jennifer McCurdy

Jennifer A McCurdy
Project Manager

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SVP-30A L1582381-07	21
SVP-30A-DUP L1582381-08	23
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SVP-33A L1582381-01 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/01/23 13:30	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 14:29	02/07/23 14:29	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 11:44	02/08/23 11:44	BAW	Mt. Juliet, TN

SVP-33A-DUP L1582381-02 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/01/23 13:30	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 15:10	02/07/23 15:10	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 12:56	02/08/23 12:56	BAW	Mt. Juliet, TN

SVP-33B L1582381-03 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/01/23 14:16	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 15:51	02/07/23 15:51	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 12:59	02/08/23 12:59	BAW	Mt. Juliet, TN

SVP-32A L1582381-04 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/01/23 11:12	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 16:32	02/07/23 16:32	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:02	02/08/23 13:02	BAW	Mt. Juliet, TN

SVP-32B L1582381-05 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/01/23 11:56	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 17:13	02/07/23 17:13	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:04	02/08/23 13:04	BAW	Mt. Juliet, TN

SVP-31A L1582381-06 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/01/23 10:02	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 17:54	02/07/23 17:54	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:08	02/08/23 13:08	BAW	Mt. Juliet, TN

SVP-30A L1582381-07 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/02/23 13:17	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 18:35	02/07/23 18:35	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:12	02/08/23 13:12	BAW	Mt. Juliet, TN

SVP-30A-DUP L1582381-08 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/02/23 13:17	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 19:17	02/07/23 19:17	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:15	02/08/23 13:15	BAW	Mt. Juliet, TN

SVP-30B L1582381-09 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/02/23 12:43	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 19:58	02/07/23 19:58	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:18	02/08/23 13:18	BAW	Mt. Juliet, TN

SVP-29A L1582381-10 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/01/23 15:59	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 20:40	02/07/23 20:40	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:21	02/08/23 13:21	BAW	Mt. Juliet, TN

SVP-29B L1582381-11 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/02/23 12:25	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 21:21	02/07/23 21:21	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:23	02/08/23 13:23	BAW	Mt. Juliet, TN

SVP-28A L1582381-12 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/02/23 10:29	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 22:01	02/07/23 22:01	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:30	02/08/23 13:30	BAW	Mt. Juliet, TN

SVP-28B L1582381-13 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/02/23 11:07	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 22:43	02/07/23 22:43	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:33	02/08/23 13:33	BAW	Mt. Juliet, TN

VP-1271-1 L1582381-14 Air

Collected by	Collected date/time	Received date/time
Jesse Thornton	02/02/23 13:46	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2001517	1	02/07/23 23:25	02/07/23 23:25	DAH	Mt. Juliet, TN
Organic Compounds (GC) by Method ASTM 1946	WG2002305	1	02/08/23 13:36	02/08/23 13:36	BAW	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jennifer A McCurdy
Project Manager

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
SVP-33A	L1582381-01	Acetone	67-64-1	58.10	1.25	2.97	2.74	6.51		1	WG2001517
SVP-33A	L1582381-01	Chloroform	67-66-3	119	0.200	0.973	0.511	2.49		1	WG2001517
SVP-33A	L1582381-01	Chloromethane	74-87-3	50.50	0.200	0.413	0.346	0.715		1	WG2001517
SVP-33A	L1582381-01	Cyclohexane	110-82-7	84.20	0.200	0.689	0.389	1.34		1	WG2001517
SVP-33A	L1582381-01	Ethanol	64-17-5	46.10	1.25	2.36	8.66	16.3		1	WG2001517
SVP-33A	L1582381-01	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.962	5.41		1	WG2001517
SVP-33A	L1582381-01	Methylene Chloride	75-09-2	84.90	0.200	0.694	0.373	1.30		1	WG2001517
SVP-33A	L1582381-01	2-Propanol	67-63-0	60.10	1.25	3.07	1.45	3.56		1	WG2001517
SVP-33A	L1582381-01	Tetrachloroethylene	127-18-4	166	0.200	1.36	81.5	553		1	WG2001517
SVP-33A-DUP	L1582381-02	Acetone	67-64-1	58.10	1.25	2.97	5.72	13.6		1	WG2001517
SVP-33A-DUP	L1582381-02	Chloroform	67-66-3	119	0.200	0.973	0.455	2.21		1	WG2001517
SVP-33A-DUP	L1582381-02	Ethanol	64-17-5	46.10	1.25	2.36	29.6	55.8		1	WG2001517
SVP-33A-DUP	L1582381-02	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.843	4.74		1	WG2001517
SVP-33A-DUP	L1582381-02	Methylene Chloride	75-09-2	84.90	0.200	0.694	1.20	4.17		1	WG2001517
SVP-33A-DUP	L1582381-02	2-Propanol	67-63-0	60.10	1.25	3.07	4.79	11.8		1	WG2001517
SVP-33A-DUP	L1582381-02	Tetrachloroethylene	127-18-4	166	0.200	1.36	70.8	481		1	WG2001517
SVP-33A-DUP	L1582381-02	Toluene	108-88-3	92.10	0.500	1.88	0.522	1.97		1	WG2001517
SVP-33B	L1582381-03	Acetone	67-64-1	58.10	1.25	2.97	1.33	3.16		1	WG2001517
SVP-33B	L1582381-03	Chloroform	67-66-3	119	0.200	0.973	0.410	2.00		1	WG2001517
SVP-33B	L1582381-03	Cyclohexane	110-82-7	84.20	0.200	0.689	0.596	2.05		1	WG2001517
SVP-33B	L1582381-03	Ethanol	64-17-5	46.10	1.25	2.36	2.63	4.96		1	WG2001517
SVP-33B	L1582381-03	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.804	4.52		1	WG2001517
SVP-33B	L1582381-03	Tetrachloroethylene	127-18-4	166	0.200	1.36	28.4	193		1	WG2001517
SVP-32A	L1582381-04	Acetone	67-64-1	58.10	1.25	2.97	7.17	17.0		1	WG2001517
SVP-32A	L1582381-04	Chloroform	67-66-3	119	0.200	0.973	1.52	7.40		1	WG2001517
SVP-32A	L1582381-04	Chloromethane	74-87-3	50.50	0.200	0.413	0.276	0.570		1	WG2001517
SVP-32A	L1582381-04	Ethanol	64-17-5	46.10	1.25	2.36	8.19	15.4		1	WG2001517
SVP-32A	L1582381-04	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.685	3.85		1	WG2001517
SVP-32A	L1582381-04	Tetrachloroethylene	127-18-4	166	0.200	1.36	13.7	93.0		1	WG2001517
SVP-32B	L1582381-05	Acetone	67-64-1	58.10	1.25	2.97	4.19	9.96		1	WG2001517
SVP-32B	L1582381-05	Chloroform	67-66-3	119	0.200	0.973	0.476	2.32		1	WG2001517
SVP-32B	L1582381-05	Chloromethane	74-87-3	50.50	0.200	0.413	0.411	0.849		1	WG2001517
SVP-32B	L1582381-05	Ethanol	64-17-5	46.10	1.25	2.36	3.14	5.92		1	WG2001517
SVP-32B	L1582381-05	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	1.02	5.73		1	WG2001517
SVP-32B	L1582381-05	Tetrachloroethylene	127-18-4	166	0.200	1.36	46.1	313		1	WG2001517
SVP-31A	L1582381-06	Acetone	67-64-1	58.10	1.25	2.97	1.83	4.35		1	WG2001517
SVP-31A	L1582381-06	Chloroform	67-66-3	119	0.200	0.973	0.292	1.42		1	WG2001517
SVP-31A	L1582381-06	Chloromethane	74-87-3	50.50	0.200	0.413	0.417	0.861		1	WG2001517
SVP-31A	L1582381-06	Ethanol	64-17-5	46.10	1.25	2.36	9.34	17.6		1	WG2001517
SVP-31A	L1582381-06	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.523	2.94		1	WG2001517
SVP-31A	L1582381-06	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.729	3.61		1	WG2001517
SVP-31A	L1582381-06	Tetrachloroethylene	127-18-4	166	0.200	1.36	13.5	91.7		1	WG2001517
SVP-30A	L1582381-07	Acetone	67-64-1	58.10	1.25	2.97	47.6	113		1	WG2001517
SVP-30A	L1582381-07	Chloroform	67-66-3	119	0.200	0.973	1.15	5.60		1	WG2001517
SVP-30A	L1582381-07	Chloromethane	74-87-3	50.50	0.200	0.413	0.201	0.415		1	WG2001517
SVP-30A	L1582381-07	Ethanol	64-17-5	46.10	1.25	2.36	15.2	28.7		1	WG2001517
SVP-30A	L1582381-07	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.255	1.43		1	WG2001517
SVP-30A	L1582381-07	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.479	2.37		1	WG2001517
SVP-30A	L1582381-07	Methylene Chloride	75-09-2	84.90	0.200	0.694	0.723	2.51		1	WG2001517
SVP-30A	L1582381-07	2-Propanol	67-63-0	60.10	1.25	3.07	2.27	5.58		1	WG2001517
SVP-30A	L1582381-07	Tetrachloroethylene	127-18-4	166	0.200	1.36	13.0	88.3		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
SVP-30A-DUP	L1582381-08	Acetone	67-64-1	58.10	1.25	2.97	33.2	78.9		1	WG2001517
SVP-30A-DUP	L1582381-08	Chloroform	67-66-3	119	0.200	0.973	1.26	6.13		1	WG2001517
SVP-30A-DUP	L1582381-08	Cyclohexane	110-82-7	84.20	0.200	0.689	0.221	0.761		1	WG2001517
SVP-30A-DUP	L1582381-08	Ethanol	64-17-5	46.10	1.25	2.36	7.91	14.9		1	WG2001517
SVP-30A-DUP	L1582381-08	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.254	1.43		1	WG2001517
SVP-30A-DUP	L1582381-08	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.474	2.34		1	WG2001517
SVP-30A-DUP	L1582381-08	Tetrachloroethylene	127-18-4	166	0.200	1.36	14.2	96.4		1	WG2001517
SVP-30B	L1582381-09	Acetone	67-64-1	58.10	1.25	2.97	15.7	37.3		1	WG2001517
SVP-30B	L1582381-09	Chloroform	67-66-3	119	0.200	0.973	8.14	39.6		1	WG2001517
SVP-30B	L1582381-09	Cyclohexane	110-82-7	84.20	0.200	0.689	0.670	2.31		1	WG2001517
SVP-30B	L1582381-09	Ethanol	64-17-5	46.10	1.25	2.36	5.55	10.5		1	WG2001517
SVP-30B	L1582381-09	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.272	1.53		1	WG2001517
SVP-30B	L1582381-09	Tetrachloroethylene	127-18-4	166	0.200	1.36	45.4	308		1	WG2001517
SVP-30B	L1582381-09	1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.211	1.15		1	WG2001517
SVP-29A	L1582381-10	Acetone	67-64-1	58.10	1.25	2.97	2.10	4.99		1	WG2001517
SVP-29A	L1582381-10	Chloroform	67-66-3	119	0.200	0.973	0.348	1.69		1	WG2001517
SVP-29A	L1582381-10	Ethanol	64-17-5	46.10	1.25	2.36	2.32	4.37		1	WG2001517
SVP-29A	L1582381-10	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.259	1.46		1	WG2001517
SVP-29A	L1582381-10	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.456	2.26		1	WG2001517
SVP-29A	L1582381-10	Tetrachloroethylene	127-18-4	166	0.200	1.36	13.0	88.3		1	WG2001517
SVP-29B	L1582381-11	Acetone	67-64-1	58.10	1.25	2.97	7.80	18.5		1	WG2001517
SVP-29B	L1582381-11	Chloroform	67-66-3	119	0.200	0.973	0.740	3.60		1	WG2001517
SVP-29B	L1582381-11	Chloromethane	74-87-3	50.50	0.200	0.413	0.208	0.430		1	WG2001517
SVP-29B	L1582381-11	Cyclohexane	110-82-7	84.20	0.200	0.689	0.658	2.27		1	WG2001517
SVP-29B	L1582381-11	1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.659	2.37		1	WG2001517
SVP-29B	L1582381-11	Ethanol	64-17-5	46.10	1.25	2.36	5.96	11.2		1	WG2001517
SVP-29B	L1582381-11	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.250	1.40		1	WG2001517
SVP-29B	L1582381-11	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.454	2.25		1	WG2001517
SVP-29B	L1582381-11	Methylene Chloride	75-09-2	84.90	0.200	0.694	0.209	0.726		1	WG2001517
SVP-29B	L1582381-11	2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.67	7.87		1	WG2001517
SVP-29B	L1582381-11	2-Propanol	67-63-0	60.10	1.25	3.07	1.79	4.40		1	WG2001517
SVP-29B	L1582381-11	Tetrachloroethylene	127-18-4	166	0.200	1.36	31.2	212		1	WG2001517
SVP-29B	L1582381-11	1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.298	1.62		1	WG2001517
SVP-28A	L1582381-12	Acetone	67-64-1	58.10	1.25	2.97	3.79	9.01		1	WG2001517
SVP-28A	L1582381-12	Cyclohexane	110-82-7	84.20	0.200	0.689	0.638	2.20		1	WG2001517
SVP-28A	L1582381-12	Ethanol	64-17-5	46.10	1.25	2.36	32.7	61.7		1	WG2001517
SVP-28A	L1582381-12	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.249	1.40		1	WG2001517
SVP-28A	L1582381-12	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.485	2.40		1	WG2001517
SVP-28A	L1582381-12	Methylene Chloride	75-09-2	84.90	0.200	0.694	1.15	3.99		1	WG2001517
SVP-28A	L1582381-12	2-Propanol	67-63-0	60.10	1.25	3.07	4.74	11.7		1	WG2001517
SVP-28A	L1582381-12	Tetrachloroethylene	127-18-4	166	0.200	1.36	11.5	78.1		1	WG2001517
SVP-28B	L1582381-13	Acetone	67-64-1	58.10	1.25	2.97	1.44	3.42		1	WG2001517
SVP-28B	L1582381-13	Cyclohexane	110-82-7	84.20	0.200	0.689	0.779	2.68		1	WG2001517
SVP-28B	L1582381-13	Ethanol	64-17-5	46.10	1.25	2.36	2.47	4.66		1	WG2001517
SVP-28B	L1582381-13	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.263	1.48		1	WG2001517
SVP-28B	L1582381-13	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.457	2.26		1	WG2001517
SVP-28B	L1582381-13	Tetrachloroethylene	127-18-4	166	0.200	1.36	29.7	202		1	WG2001517
SVP-28B	L1582381-13	1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.290	1.58		1	WG2001517
VP-1271-1	L1582381-14	Acetone	67-64-1	58.10	1.25	2.97	14.7	34.9		1	WG2001517
VP-1271-1	L1582381-14	Chloroform	67-66-3	119	0.200	0.973	0.255	1.24		1	WG2001517
VP-1271-1	L1582381-14	Chloromethane	74-87-3	50.50	0.200	0.413	0.228	0.471		1	WG2001517
VP-1271-1	L1582381-14	Ethanol	64-17-5	46.10	1.25	2.36	23.8	44.9		1	WG2001517
VP-1271-1	L1582381-14	Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.520	2.92		1	WG2001517
VP-1271-1	L1582381-14	Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.564	2.79		1	WG2001517
VP-1271-1	L1582381-14	2-Propanol	67-63-0	60.10	1.25	3.07	2.59	6.37		1	WG2001517
VP-1271-1	L1582381-14	Tetrachloroethylene	127-18-4	166	0.200	1.36	8.19	55.6		1	WG2001517

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Organic Compounds (GC) by Method ASTM 1946

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL	Result	Qualifier	Dilution	Batch
					%	%			
SVP-33A	L1582381-01	Helium	7440-59-7		0.100	0.154		1	WG2002305
SVP-33A-DUP	L1582381-02	Helium	7440-59-7		0.100	0.245		1	WG2002305
SVP-33B	L1582381-03	Helium	7440-59-7		0.100	0.106		1	WG2002305
SVP-32B	L1582381-05	Helium	7440-59-7		0.100	0.375		1	WG2002305
SVP-30A	L1582381-07	Helium	7440-59-7		0.100	0.302		1	WG2002305
SVP-30A-DUP	L1582381-08	Helium	7440-59-7		0.100	0.336		1	WG2002305
SVP-30B	L1582381-09	Helium	7440-59-7		0.100	0.205		1	WG2002305
SVP-29A	L1582381-10	Helium	7440-59-7		0.100	0.307		1	WG2002305
SVP-29B	L1582381-11	Helium	7440-59-7		0.100	0.232		1	WG2002305
SVP-28B	L1582381-13	Helium	7440-59-7		0.100	1.34		1	WG2002305
VP-1271-1	L1582381-14	Helium	7440-59-7		0.100	0.357		1	WG2002305

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.74	6.51		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	0.511	2.49		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	0.346	0.715		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	0.389	1.34		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	8.66	16.3		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.962	5.41		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.373	1.30		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	1.45	3.56		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	81.5	553		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.7*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.154		1	WG2002305

Cp Tc Ss Cn Ds Sr Qc Gl Al Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.72	13.6		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	0.455	2.21		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	29.6	55.8		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.843	4.74		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.20	4.17		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	4.79	11.8		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	70.8	481		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	0.522	1.97		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.7*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.245		1	WG2002305

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.33	3.16		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	0.410	2.00		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	0.596	2.05		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	2.63	4.96		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.804	4.52		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	28.4	193		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.7*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.106		1	WG2002305

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	7.17	17.0		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	1.52	7.40		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	0.276	0.570		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	8.19	15.4		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.685	3.85		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	13.7	93.0		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.8*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG2002305

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.19	9.96		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	0.476	2.32		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	0.411	0.849		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	3.14	5.92		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	1.02	5.73		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	46.1	313		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.4*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.375		1	WG2002305

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.83	4.35		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	0.292	1.42		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	0.417	0.861		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	9.34	17.6		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.523	2.94		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.729	3.61		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	13.5	91.7		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.4*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG2002305

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	47.6	113		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	1.15	5.60		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	0.201	0.415		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	15.2	28.7		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.255	1.43		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.479	2.37		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.723	2.51		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	2.27	5.58		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	13.0	88.3		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.302		1	WG2002305

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	33.2	78.9		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	1.26	6.13		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	0.221	0.761		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	7.91	14.9		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.254	1.43		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.474	2.34		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	14.2	96.4		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.0*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.336		1	WG2002305

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	15.7	37.3		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	8.14	39.6		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	0.670	2.31		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	5.55	10.5		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.272	1.53		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	45.4	308		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.211	1.15		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.4*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.205		1	WG2002305

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.10	4.99		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	0.348	1.69		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	2.32	4.37		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.259	1.46		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.456	2.26		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	13.0	88.3		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.0*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.307		1	WG2002305

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	7.80	18.5		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	0.740	3.60		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	0.208	0.430		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	0.658	2.27		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.659	2.37		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	5.96	11.2		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.250	1.40		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.454	2.25		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.209	0.726		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.67	7.87		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	1.79	4.40		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	31.2	212		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.298	1.62		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.4*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.232		1	WG2002305

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.79	9.01		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	0.638	2.20		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	32.7	61.7		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.249	1.40		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.485	2.40		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.15	3.99		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	4.74	11.7		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	11.5	78.1		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.0*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	ND		1	WG2002305

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.44	3.42		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	0.779	2.68		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	2.47	4.66		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.263	1.48		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.457	2.26		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	29.7	202		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	0.290	1.58		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.8*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	1.34		1	WG2002305

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	14.7	34.9		1	WG2001517
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2001517
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2001517
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2001517
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2001517
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2001517
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2001517
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2001517
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2001517
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2001517
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2001517
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2001517
Chloroform	67-66-3	119	0.200	0.973	0.255	1.24		1	WG2001517
Chloromethane	74-87-3	50.50	0.200	0.413	0.228	0.471		1	WG2001517
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2001517
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2001517
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2001517
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2001517
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2001517
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2001517
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2001517
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2001517
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2001517
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2001517
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2001517
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2001517
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2001517
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2001517
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2001517
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2001517
Ethanol	64-17-5	46.10	1.25	2.36	23.8	44.9		1	WG2001517
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2001517
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2001517
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.520	2.92		1	WG2001517
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.564	2.79		1	WG2001517
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2001517
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2001517
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2001517
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2001517
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2001517
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2001517
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2001517
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2001517
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2001517
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2001517
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2001517
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2001517
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2001517
2-Propanol	67-63-0	60.10	1.25	3.07	2.59	6.37		1	WG2001517
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2001517
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2001517
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2001517
Tetrachloroethylene	127-18-4	166	0.200	1.36	8.19	55.6		1	WG2001517
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2001517
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2001517
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2001517

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2001517
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2001517
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2001517
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2001517
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2001517
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2001517
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2001517
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2001517
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2001517
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2001517
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2001517
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2001517
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.4*				WG2001517

Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL %	Result %	Qualifier	Dilution	Batch
Helium	7440-59-7		0.100	0.357		1	WG2002305

Method Blank (MB)

(MB) R3888303-3 02/07/23 10:15

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

Method Blank (MB)

(MB) R3888303-3 02/07/23 10:15

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.166	J	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	*95.9*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3888303-1 02/07/23 08:53 • (LCSD) R3888303-2 02/07/23 09:35

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.31	4.47	115	119	70.0-130			3.64	25
Allyl Chloride	3.75	4.22	4.24	113	113	70.0-130			0.473	25
Benzene	3.75	4.29	4.37	114	117	70.0-130			1.85	25
Benzyl Chloride	3.75	4.26	4.34	114	116	70.0-152			1.86	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3888303-1 02/07/23 08:53 • (LCSD) R3888303-2 02/07/23 09:35

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromodichloromethane	3.75	4.33	4.44	115	118	70.0-130			2.51	25
Bromoform	3.75	4.41	4.46	118	119	70.0-130			1.13	25
Bromomethane	3.75	3.92	4.07	105	109	70.0-130			3.75	25
1,3-Butadiene	3.75	4.14	4.19	110	112	70.0-130			1.20	25
Carbon disulfide	3.75	4.18	4.33	111	115	70.0-130			3.53	25
Carbon tetrachloride	3.75	4.30	4.36	115	116	70.0-130			1.39	25
Chlorobenzene	3.75	4.24	4.27	113	114	70.0-130			0.705	25
Chloroethane	3.75	3.81	3.94	102	105	70.0-130			3.35	25
Chloroform	3.75	4.18	4.33	111	115	70.0-130			3.53	25
Chloromethane	3.75	4.31	4.36	115	116	70.0-130			1.15	25
2-Chlorotoluene	3.75	4.34	4.36	116	116	70.0-130			0.460	25
Cyclohexane	3.75	4.21	4.28	112	114	70.0-130			1.65	25
Dibromochloromethane	3.75	4.37	4.46	117	119	70.0-130			2.04	25
1,2-Dibromoethane	3.75	4.28	4.32	114	115	70.0-130			0.930	25
1,2-Dichlorobenzene	3.75	4.35	4.36	116	116	70.0-130			0.230	25
1,3-Dichlorobenzene	3.75	4.36	4.43	116	118	70.0-130			1.59	25
1,4-Dichlorobenzene	3.75	4.50	4.51	120	120	70.0-130			0.222	25
1,2-Dichloroethane	3.75	4.32	4.41	115	118	70.0-130			2.06	25
1,1-Dichloroethane	3.75	4.21	4.33	112	115	70.0-130			2.81	25
1,1-Dichloroethene	3.75	4.28	4.38	114	117	70.0-130			2.31	25
cis-1,2-Dichloroethene	3.75	4.23	4.31	113	115	70.0-130			1.87	25
trans-1,2-Dichloroethene	3.75	4.22	4.39	113	117	70.0-130			3.95	25
1,2-Dichloropropane	3.75	4.21	4.24	112	113	70.0-130			0.710	25
cis-1,3-Dichloropropene	3.75	4.16	4.22	111	113	70.0-130			1.43	25
trans-1,3-Dichloropropene	3.75	4.34	4.37	116	117	70.0-130			0.689	25
1,4-Dioxane	3.75	4.24	4.32	113	115	70.0-140			1.87	25
Ethanol	3.75	4.31	4.39	115	117	55.0-148			1.84	25
Ethylbenzene	3.75	4.35	4.43	116	118	70.0-130			1.82	25
4-Ethyltoluene	3.75	4.29	4.44	114	118	70.0-130			3.44	25
Trichlorofluoromethane	3.75	4.31	4.43	115	118	70.0-130			2.75	25
Dichlorodifluoromethane	3.75	4.19	4.35	112	116	64.0-139			3.75	25
1,1,2-Trichlorotrifluoroethane	3.75	4.23	4.32	113	115	70.0-130			2.11	25
1,2-Dichlorotetrafluoroethane	3.75	4.26	4.35	114	116	70.0-130			2.09	25
Heptane	3.75	4.36	4.55	116	121	70.0-130			4.26	25
Hexachloro-1,3-butadiene	3.75	4.45	4.52	119	121	70.0-151			1.56	25
n-Hexane	3.75	4.28	4.36	114	116	70.0-130			1.85	25
Isopropylbenzene	3.75	4.30	4.37	115	117	70.0-130			1.61	25
Methylene Chloride	3.75	4.24	4.28	113	114	70.0-130			0.939	25
Methyl Butyl Ketone	3.75	4.59	4.72	122	126	70.0-149			2.79	25
Methyl Ethyl Ketone	3.75	4.35	4.49	116	120	70.0-130			3.17	25

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3888303-1 02/07/23 08:53 • (LCSD) R3888303-2 02/07/23 09:35

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	3.75	4.64	4.73	124	126	70.0-139			1.92	25
Methyl Methacrylate	3.75	4.49	4.59	120	122	70.0-130			2.20	25
MTBE	3.75	4.20	4.25	112	113	70.0-130			1.18	25
Naphthalene	3.75	4.36	4.43	116	118	70.0-159			1.59	25
2-Propanol	3.75	4.39	4.47	117	119	70.0-139			1.81	25
Propene	3.75	4.19	4.27	112	114	64.0-144			1.89	25
Styrene	3.75	4.31	4.35	115	116	70.0-130			0.924	25
1,1,2,2-Tetrachloroethane	3.75	4.22	4.23	113	113	70.0-130			0.237	25
Tetrachloroethylene	3.75	4.25	4.35	113	116	70.0-130			2.33	25
Tetrahydrofuran	3.75	4.40	4.49	117	120	70.0-137			2.02	25
Toluene	3.75	4.32	4.39	115	117	70.0-130			1.61	25
1,2,4-Trichlorobenzene	3.75	4.39	4.49	117	120	70.0-160			2.25	25
1,1,1-Trichloroethane	3.75	4.27	4.37	114	117	70.0-130			2.31	25
1,1,2-Trichloroethane	3.75	4.21	4.40	112	117	70.0-130			4.41	25
Trichloroethylene	3.75	4.23	4.25	113	113	70.0-130			0.472	25
1,2,4-Trimethylbenzene	3.75	4.34	4.38	116	117	70.0-130			0.917	25
1,3,5-Trimethylbenzene	3.75	4.39	4.29	117	114	70.0-130			2.30	25
2,2,4-Trimethylpentane	3.75	4.29	4.38	114	117	70.0-130			2.08	25
Vinyl chloride	3.75	3.93	4.08	105	109	70.0-130			3.75	25
Vinyl Bromide	3.75	4.17	4.20	111	112	70.0-130			0.717	25
Vinyl acetate	3.75	3.81	4.07	102	109	70.0-130			6.60	25
m&p-Xylene	7.50	8.69	8.78	116	117	70.0-130			1.03	25
o-Xylene	3.75	4.22	4.24	113	113	70.0-130			0.473	25
TPH (GC/MS) Low Fraction	203	200	206	98.5	101	70.0-130			2.96	25
(S) 1,4-Bromofluorobenzene				*98.3*	*96.6*	*60.0-140*				

1 Cp | 2 Tc | 3 Ss | 4 Cn | 5 Ds | 6 Sr | 7 Qc | 8 Gl | 9 Al | 10 Sc

QUALITY CONTROL SUMMARY

L1582381-01,02,03,04,05,06,07,08,09,10,11,12,13,14

Method Blank (MB)

(MB) R3888690-3 02/08/23 11:24

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Helium	U		0.0259	0.100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3888690-1 02/08/23 11:17 • (LCSD) R3888690-2 02/08/23 11:21

Analyte	Spike Amount %	LCS Result %	LCSD Result %	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Helium	2.50	2.89	2.77	116	111	70.0-130			4.24	25

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
RMD Environmental - Walnut Creek, CA

1371 Oakland Blvd.

Suite 200

Billing Information:
Accounts Payable
1371 Oakland Blvd.

Suite 200
Walnut Creek, CA 94596

Report To: Erin Male

Email To: iinouye@rmdes.net;emale@rmdes.net

Project Description: Police Credit Union

City/State Collected: San Francisco, CA

Please Circle: PT MT CT ET

Phone: 415-571-6627

Client Project # 01-DTSC-007

Lab Project # RMDENVPHCA-01DTSC007

Collected by (print): Jesse Thornton

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Three Day
___ Next Day ___ Five Day
___ Two Day

Date Results Needed: STANDARD TAT

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE
MT JULIET, TN
12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1582381
K103

Acctnum: RMDENVPHCA
Template: T204372
Prelogin: P968419
PM: 3828 - Jennifer A McCurdy
PB: CW 01/03/23
Shipped Via: FedEX Ground

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	TO-15, HELIUM Summa	TO-15SIM Summa			Rem./Contaminant	Sample # (lab only)
												~~-01~~
SVP-33A	005631	007860	2/1/23	1330	-28	-6	X					-01
SVP-33A-DUP	010632	007860	2/1/23	1330	-28	-6	↓					-02
SVP-33B	022260	011485	2/1/23	1416	-30	-5	↓					-03
SVP-32A	022548	007461	2/1/23	1112	-30	-5	↓					-04
SVP-32B	010752	006824	2/1/23	1156	-28	-5	↓					-05
SVP-31A	005461	011481	2/1/23	1002	-29	-5	↓					-06
SVP-30A	008917	011460	2/2/23	1317	-28	-6	↓					-07
SVP-30A-DUP	012432	011460	2/2/23	1317	-28	-6	↓					-08
SVP-30B	006468	006410	2/2/23	1243	-29	-5	↓					-09

Remarks:

Samples returned via: __ UPS __ FedEx __ Courier ______

Tracking #

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	
	2/3/23	1105				Condition: (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	COC Seal Intact: ___Y ___N ___NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 2/4/23	Time: 1020	NCF:

Company Name/Address:	Billing Information:	Chain of Custody Page 2 of 2
RMD Environmental - Walnut Creek, CA 1371 Oakland Blvd. Suite 200	Accounts Payable 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596	Pace PEOPLE ADVANCING SCIENCE MT JULIET, TN 12065 Lebanon Road Mt Juliet, TN 37122 Phone: 615-758-5858 Alt: 800-767-5859 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf
Report To: **Erin Male**	Email To: iinouye@rmdes.net;emale@rmdes.net	SDG # L1582381
Project Description: Police Credit Union	City/State Collected: San Francisco, CA	Please Circle: PT MT CT ET
Phone: 415-571-6627	Client Project # 01-DTSC-007	Lab Project # RMDENVPHCA-01DTSC007
Collected by (print): Jesse Thornton	Site/Facility ID #	P.O. #
Collected by (signature): [signature]	Rush? (Lab MUST Be Notified) ___ Same Day ___ Three Day ___ Next Day ___ Five Day ___ Two Day	Date Results Needed: STANDARD TAT

Table #

Acctnum: RMDENVPHCA
Template: T204372
Prelogin: P968419
PM: 3828 - Jennifer A McCurdy
PB: CSL 01/03/23
Shipped Via: FedEX Ground

Analysis

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	TO-15, HELIUM Summa	TO-15SIM Summa			Rem./Contaminant	Sample # (lab only)
SVP-29A	010656	011123	2/1/23	1559	-30	-5	X					-10
SVP-29B	005173	007462	2/2/23	1225	-28	-5	↓					-11
SVP-28A	021508	005972	2/2/23	1029	-30	-5	↓					-12
SVP-28B	022189	006799	2/2/23	1107	-28	-5	↓					-13
~~SVP-1271-1~~ VP-1271-1	008512	007727	2/2/23	1346	-30	-5	↓					-14

Remarks:

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	2/3/23	1105			
			Received for lab by: (Signature) [signature]	2/4/23	1020

Samples returned via: __ UPS X FedEx __ Courier __ ____

Tracking #

Hold #

Condition: (lab use only)

COC Seal Intact: ___ Y ___ N ___ NA

NCF:

ANALYTICAL REPORT

February 16, 2023

Revised Report

RMD Environmental - Walnut Creek, CA

Sample Delivery Group:	L1582384
Samples Received:	02/04/2023
Project Number:	01-DTSC-007
Description:	Police Credit Union
Report To:	Ivy Inouye 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Entire Report Reviewed By:

Jennifer A McCurdy
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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7 Qc
8 Gl
9 Al
10 Sc

IAQ-1271-3 L1582384-01 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 08:03	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 15:48	02/06/23 15:48	DBB	Mt. Juliet, TN

OAA-4 L1582384-02 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 08:08	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 16:25	02/06/23 16:25	DBB	Mt. Juliet, TN

IAQ-1271-2 L1582384-03 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 08:11	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 17:02	02/06/23 17:02	DBB	Mt. Juliet, TN

IAQ-1271-1 L1582384-04 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 08:13	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 17:40	02/06/23 17:40	DBB	Mt. Juliet, TN

IAQ-1271-DUP L1582384-05 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 08:23	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 18:18	02/06/23 18:18	DBB	Mt. Juliet, TN

IAQ-1281-2 L1582384-06 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 08:44	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 18:56	02/06/23 18:56	DBB	Mt. Juliet, TN

IAQ-1281-1 L1582384-07 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 09:27	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 19:34	02/06/23 19:34	DBB	Mt. Juliet, TN

IAQ-1284-3 L1582384-09 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 09:10	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 20:12	02/06/23 20:12	DBB	Mt. Juliet, TN

IAQ-1284-1 L1582384-10 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 09:15	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 20:50	02/06/23 20:50	DBB	Mt. Juliet, TN

OAA-5 L1582384-11 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 09:28	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 21:28	02/06/23 21:28	DBB	Mt. Juliet, TN

IAQ-1276-2 L1582384-12 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 09:42	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 22:06	02/06/23 22:06	DBB	Mt. Juliet, TN

IAQ-1276-1 L1582384-13 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 09:45	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 22:43	02/06/23 22:43	DBB	Mt. Juliet, TN

OAA-6 L1582384-14 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 09:50	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 23:21	02/06/23 23:21	DBB	Mt. Juliet, TN

IAQ-1280-2 L1582384-15 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 12:16	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/06/23 23:58	02/06/23 23:58	DBB	Mt. Juliet, TN

IAQ-1281-3 L1582384-16 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 08:45	02/04/23 10:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2000887	1	02/07/23 00:35	02/07/23 00:35	DBB	Mt. Juliet, TN

IAQ-1280-1 L1582384-17 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 12:18	02/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2001306	1	02/07/23 16:24	02/07/23 16:24	DAH	Mt. Juliet, TN

IAQ-1275-1 L1582384-18 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 14:47	02/07/23 09:00

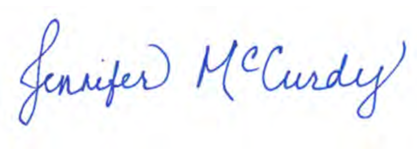
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2001306	1	02/07/23 17:04	02/07/23 17:04	DAH	Mt. Juliet, TN

IAQ-1275-3 L1582384-19 Air

Collected by	Collected date/time	Received date/time
Brendan Englert	02/02/23 14:46	02/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2001306	1	02/07/23 17:44	02/07/23 17:44	DAH	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jennifer A McCurdy
Project Manager

Report Revision History

Level II Report - Version 1: 02/09/23 13:58
Level II Report - Version 2: 02/14/23 12:51

Project Comments

Regenerate to include EDD. JM
Revise to correct sample ID per client. 02/16/23 JM

Volatile Organic Compounds (MS) by Method TO-15-SIM

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
IAQ-1271-3	L1582384-01	Benzene	71-43-2	78.10	0.0200	0.0639	0.263	0.840		1	WG2000887
IAQ-1271-3	L1582384-01	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0804	0.506		1	WG2000887
IAQ-1271-3	L1582384-01	Chloroform	67-66-3	119	0.0200	0.0973	0.213	1.04		1	WG2000887
IAQ-1271-3	L1582384-01	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.653	1.35		1	WG2000887
IAQ-1271-3	L1582384-01	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0428	0.173		1	WG2000887
IAQ-1271-3	L1582384-01	Ethylbenzene	100-41-4	106	0.0300	0.130	0.109	0.473		1	WG2000887
IAQ-1271-3	L1582384-01	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0223	0.151		1	WG2000887
OAA-4	L1582384-02	Benzene	71-43-2	78.10	0.0200	0.0639	0.280	0.894		1	WG2000887
OAA-4	L1582384-02	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0835	0.526		1	WG2000887
OAA-4	L1582384-02	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.564	1.16		1	WG2000887
OAA-4	L1582384-02	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0227	0.0919		1	WG2000887
OAA-4	L1582384-02	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0757	0.328		1	WG2000887
IAQ-1271-2	L1582384-03	Benzene	71-43-2	78.10	0.0200	0.0639	0.269	0.859		1	WG2000887
IAQ-1271-2	L1582384-03	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0820	0.516		1	WG2000887
IAQ-1271-2	L1582384-03	Chloroform	67-66-3	119	0.0200	0.0973	0.155	0.754		1	WG2000887
IAQ-1271-2	L1582384-03	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.658	1.36		1	WG2000887
IAQ-1271-2	L1582384-03	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0505	0.204		1	WG2000887
IAQ-1271-2	L1582384-03	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0841	0.365		1	WG2000887
IAQ-1271-2	L1582384-03	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0389	0.264		1	WG2000887
IAQ-1271-1	L1582384-04	Benzene	71-43-2	78.10	0.0200	0.0639	0.278	0.888		1	WG2000887
IAQ-1271-1	L1582384-04	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0758	0.477		1	WG2000887
IAQ-1271-1	L1582384-04	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.634	1.31		1	WG2000887
IAQ-1271-1	L1582384-04	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0722	0.434		1	WG2000887
IAQ-1271-1	L1582384-04	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0327	0.132		1	WG2000887
IAQ-1271-1	L1582384-04	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0901	0.391		1	WG2000887
IAQ-1271-1	L1582384-04	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0230	0.156		1	WG2000887
IAQ-1271-DUP	L1582384-05	Benzene	71-43-2	78.10	0.0200	0.0639	0.281	0.898		1	WG2000887
IAQ-1271-DUP	L1582384-05	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0812	0.511		1	WG2000887
IAQ-1271-DUP	L1582384-05	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.677	1.40		1	WG2000887
IAQ-1271-DUP	L1582384-05	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0358	0.145		1	WG2000887
IAQ-1271-DUP	L1582384-05	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0909	0.394		1	WG2000887
IAQ-1271-DUP	L1582384-05	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0349	0.237		1	WG2000887
IAQ-1281-2	L1582384-06	Benzene	71-43-2	78.10	0.0200	0.0639	0.252	0.805		1	WG2000887
IAQ-1281-2	L1582384-06	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0849	0.535		1	WG2000887
IAQ-1281-2	L1582384-06	Chloroform	67-66-3	119	0.0200	0.0973	0.112	0.545		1	WG2000887
IAQ-1281-2	L1582384-06	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.621	1.28		1	WG2000887
IAQ-1281-2	L1582384-06	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0247	0.149		1	WG2000887
IAQ-1281-2	L1582384-06	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0827	0.359		1	WG2000887
IAQ-1281-2	L1582384-06	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0342	0.232		1	WG2000887
IAQ-1281-1	L1582384-07	Benzene	71-43-2	78.10	0.0200	0.0639	0.261	0.834		1	WG2000887
IAQ-1281-1	L1582384-07	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0809	0.510		1	WG2000887
IAQ-1281-1	L1582384-07	Chloroform	67-66-3	119	0.0200	0.0973	0.0992	0.483		1	WG2000887
IAQ-1281-1	L1582384-07	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.599	1.24		1	WG2000887
IAQ-1281-1	L1582384-07	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0898	0.540		1	WG2000887
IAQ-1281-1	L1582384-07	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0599	0.260		1	WG2000887
IAQ-1281-1	L1582384-07	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.141	0.957		1	WG2000887
IAQ-1281-1	L1582384-07	1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	0.164	0.892		1	WG2000887
IAQ-1284-3	L1582384-09	Benzene	71-43-2	78.10	0.0200	0.0639	0.333	1.06		1	WG2000887
IAQ-1284-3	L1582384-09	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0870	0.548		1	WG2000887
IAQ-1284-3	L1582384-09	Chloroform	67-66-3	119	0.0200	0.0973	0.613	2.98		1	WG2000887
IAQ-1284-3	L1582384-09	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.828	1.71		1	WG2000887
IAQ-1284-3	L1582384-09	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.130	0.526		1	WG2000887
IAQ-1284-3	L1582384-09	Ethylbenzene	100-41-4	106	0.0300	0.130	0.119	0.516		1	WG2000887
IAQ-1284-3	L1582384-09	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0622	0.422		1	WG2000887
IAQ-1284-3	L1582384-09	Vinyl acetate	108-05-4	86.10	0.0200	0.0704	0.0407	0.143		1	WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
IAQ-1284-1	L1582384-10	Benzene	71-43-2	78.10	0.0200	0.0639	0.289	0.923		1	WG2000887
IAQ-1284-1	L1582384-10	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0874	0.550		1	WG2000887
IAQ-1284-1	L1582384-10	Chloroform	67-66-3	119	0.0200	0.0973	0.550	2.68		1	WG2000887
IAQ-1284-1	L1582384-10	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.784	1.62		1	WG2000887
IAQ-1284-1	L1582384-10	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0219	0.132		1	WG2000887
IAQ-1284-1	L1582384-10	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.152	0.615		1	WG2000887
IAQ-1284-1	L1582384-10	Ethylbenzene	100-41-4	106	0.0300	0.130	0.118	0.512		1	WG2000887
IAQ-1284-1	L1582384-10	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0814	0.553		1	WG2000887
IAQ-1284-1	L1582384-10	Vinyl acetate	108-05-4	86.10	0.0200	0.0704	0.0307	0.108		1	WG2000887
OAA-5	L1582384-11	Benzene	71-43-2	78.10	0.0200	0.0639	0.261	0.834		1	WG2000887
OAA-5	L1582384-11	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0803	0.506		1	WG2000887
OAA-5	L1582384-11	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.525	1.08		1	WG2000887
OAA-5	L1582384-11	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0204	0.0826		1	WG2000887
OAA-5	L1582384-11	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0755	0.327		1	WG2000887
IAQ-1276-2	L1582384-12	Benzene	71-43-2	78.10	0.0200	0.0639	0.311	0.993		1	WG2000887
IAQ-1276-2	L1582384-12	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0797	0.502		1	WG2000887
IAQ-1276-2	L1582384-12	Chloroform	67-66-3	119	0.0200	0.0973	0.539	2.62		1	WG2000887
IAQ-1276-2	L1582384-12	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.773	1.60		1	WG2000887
IAQ-1276-2	L1582384-12	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0431	0.175		1	WG2000887
IAQ-1276-2	L1582384-12	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0961	0.417		1	WG2000887
IAQ-1276-2	L1582384-12	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0269	0.183		1	WG2000887
IAQ-1276-1	L1582384-13	Benzene	71-43-2	78.10	0.0200	0.0639	0.278	0.888		1	WG2000887
IAQ-1276-1	L1582384-13	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0839	0.528		1	WG2000887
IAQ-1276-1	L1582384-13	Chloroform	67-66-3	119	0.0200	0.0973	0.163	0.793		1	WG2000887
IAQ-1276-1	L1582384-13	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.684	1.41		1	WG2000887
IAQ-1276-1	L1582384-13	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0446	0.181		1	WG2000887
IAQ-1276-1	L1582384-13	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0844	0.366		1	WG2000887
IAQ-1276-1	L1582384-13	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0326	0.221		1	WG2000887
OAA-6	L1582384-14	Benzene	71-43-2	78.10	0.0200	0.0639	0.290	0.926		1	WG2000887
OAA-6	L1582384-14	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0806	0.508		1	WG2000887
OAA-6	L1582384-14	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.540	1.12		1	WG2000887
OAA-6	L1582384-14	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0785	0.340		1	WG2000887
IAQ-1280-2	L1582384-15	Benzene	71-43-2	78.10	0.0200	0.0639	0.288	0.920		1	WG2000887
IAQ-1280-2	L1582384-15	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0877	0.552		1	WG2000887
IAQ-1280-2	L1582384-15	Chloroform	67-66-3	119	0.0200	0.0973	0.523	2.55		1	WG2000887
IAQ-1280-2	L1582384-15	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.664	1.37		1	WG2000887
IAQ-1280-2	L1582384-15	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0422	0.254		1	WG2000887
IAQ-1280-2	L1582384-15	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0321	0.130		1	WG2000887
IAQ-1280-2	L1582384-15	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0989	0.429		1	WG2000887
IAQ-1280-2	L1582384-15	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0510	0.346		1	WG2000887
IAQ-1281-3	L1582384-16	Benzene	71-43-2	78.10	0.0200	0.0639	0.269	0.859		1	WG2000887
IAQ-1281-3	L1582384-16	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0786	0.495		1	WG2000887
IAQ-1281-3	L1582384-16	Chloroform	67-66-3	119	0.0200	0.0973	0.103	0.501		1	WG2000887
IAQ-1281-3	L1582384-16	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.615	1.27		1	WG2000887
IAQ-1281-3	L1582384-16	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0965	0.580		1	WG2000887
IAQ-1281-3	L1582384-16	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0255	0.103		1	WG2000887
IAQ-1281-3	L1582384-16	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0554	0.240		1	WG2000887
IAQ-1281-3	L1582384-16	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.147	0.998		1	WG2000887
IAQ-1281-3	L1582384-16	1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	0.167	0.908		1	WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
IAQ-1280-1	L1582384-17	Benzene	71-43-2	78.10	0.0200	0.0639	0.255	0.815		1	WG2001306
IAQ-1280-1	L1582384-17	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0728	0.459		1	WG2001306
IAQ-1280-1	L1582384-17	Chloroform	67-66-3	119	0.0200	0.0973	0.315	1.53		1	WG2001306
IAQ-1280-1	L1582384-17	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.634	1.31		1	WG2001306
IAQ-1280-1	L1582384-17	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0532	0.320		1	WG2001306
IAQ-1280-1	L1582384-17	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0551	0.223		1	WG2001306
IAQ-1280-1	L1582384-17	Ethylbenzene	100-41-4	106	0.0300	0.130	0.136	0.590		1	WG2001306
IAQ-1280-1	L1582384-17	1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	0.0613	0.421		1	WG2001306
IAQ-1280-1	L1582384-17	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0796	0.540		1	WG2001306
IAQ-1275-1	L1582384-18	Benzene	71-43-2	78.10	0.0200	0.0639	0.321	1.03		1	WG2001306
IAQ-1275-1	L1582384-18	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0723	0.455		1	WG2001306
IAQ-1275-1	L1582384-18	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.632	1.31		1	WG2001306
IAQ-1275-1	L1582384-18	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0250	0.101		1	WG2001306
IAQ-1275-1	L1582384-18	Ethylbenzene	100-41-4	106	0.0300	0.130	0.110	0.477		1	WG2001306
IAQ-1275-1	L1582384-18	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0317	0.215		1	WG2001306
IAQ-1275-3	L1582384-19	Benzene	71-43-2	78.10	0.0200	0.0639	0.357	1.14		1	WG2001306
IAQ-1275-3	L1582384-19	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0715	0.450		1	WG2001306
IAQ-1275-3	L1582384-19	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.599	1.24		1	WG2001306
IAQ-1275-3	L1582384-19	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0245	0.0992		1	WG2001306
IAQ-1275-3	L1582384-19	Ethylbenzene	100-41-4	106	0.0300	0.130	0.124	0.538		1	WG2001306
IAQ-1275-3	L1582384-19	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0331	0.225		1	WG2001306

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.263	0.840		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0804	0.506		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.213	1.04		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.653	1.35		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0428	0.173		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.109	0.473		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0223	0.151		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.280	0.894		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0835	0.526		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.564	1.16		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0227	0.0919		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0757	0.328		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	ND	ND		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.5*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.269	0.859		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0820	0.516		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.155	0.754		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.658	1.36		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0505	0.204		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0841	0.365		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0389	0.264		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.6*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.278	0.888		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0758	0.477		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.634	1.31		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0722	0.434		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0327	0.132		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0901	0.391		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0230	0.156		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.2*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	0.0200	0.0639	0.281	0.898		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0812	0.511		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.677	1.40		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0358	0.145		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0909	0.394		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0349	0.237		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.2*				WG2000887

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Cp Tc Ss Cn Ds Sr Qc Gl Al Sc

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.252	0.805		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0849	0.535		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.112	0.545		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.621	1.28		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0247	0.149		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0827	0.359		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0342	0.232		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.4*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.261	0.834		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0809	0.510		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.0992	0.483		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.599	1.24		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0898	0.540		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0599	0.260		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.141	0.957		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	0.164	0.892		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.2*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.333	1.06		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0870	0.548		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.613	2.98		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.828	1.71		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.130	0.526		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.119	0.516		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0622	0.422		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	0.0407	0.143		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG2000887

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.289	0.923		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0874	0.550		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.550	2.68		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.784	1.62		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0219	0.132		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.152	0.615		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.118	0.512		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0814	0.553		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	0.0307	0.108		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.261	0.834		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0803	0.506		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.525	1.08		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0204	0.0826		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0755	0.327		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	ND	ND		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.0*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.311	0.993		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0797	0.502		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.539	2.62		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.773	1.60		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0431	0.175		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0961	0.417		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0269	0.183		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.278	0.888		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0839	0.528		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.163	0.793		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.684	1.41		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0446	0.181		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0844	0.366		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0326	0.221		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.290	0.926		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0806	0.508		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.540	1.12		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0785	0.340		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	ND	ND		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.1*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.288	0.920		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0877	0.552		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.523	2.55		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.664	1.37		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0422	0.254		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0321	0.130		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0989	0.429		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0510	0.346		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.7*				WG2000887

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.269	0.859		1	WG2000887
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0786	0.495		1	WG2000887
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2000887
Chloroform	67-66-3	119	0.0200	0.0973	0.103	0.501		1	WG2000887
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.615	1.27		1	WG2000887
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2000887
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0965	0.580		1	WG2000887
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2000887
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0255	0.103		1	WG2000887
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2000887
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2000887
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2000887
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2000887
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2000887
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2000887
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0554	0.240		1	WG2000887
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2000887
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.147	0.998		1	WG2000887
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	0.167	0.908		1	WG2000887
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2000887
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2000887
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2000887
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2000887
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.0*				WG2000887

Cp Tc Ss Cn Ds Sr Qc Gl Al Sc

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.255	0.815		1	WG2001306
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0728	0.459		1	WG2001306
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2001306
Chloroform	67-66-3	119	0.0200	0.0973	0.315	1.53		1	WG2001306
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.634	1.31		1	WG2001306
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2001306
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0532	0.320		1	WG2001306
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2001306
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0551	0.223		1	WG2001306
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2001306
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2001306
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2001306
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2001306
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2001306
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2001306
Ethylbenzene	100-41-4	106	0.0300	0.130	0.136	0.590		1	WG2001306
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	0.0613	0.421		1	WG2001306
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0796	0.540		1	WG2001306
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2001306
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2001306
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2001306
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2001306
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2001306
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*118*				WG2001306

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.321	1.03		1	WG2001306
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0723	0.455		1	WG2001306
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2001306
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2001306
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.632	1.31		1	WG2001306
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2001306
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2001306
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2001306
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0250	0.101		1	WG2001306
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2001306
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2001306
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2001306
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2001306
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2001306
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2001306
Ethylbenzene	100-41-4	106	0.0300	0.130	0.110	0.477		1	WG2001306
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2001306
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0317	0.215		1	WG2001306
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2001306
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2001306
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2001306
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2001306
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2001306
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG2001306

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.357	1.14		1	WG2001306
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0715	0.450		1	WG2001306
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2001306
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2001306
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.599	1.24		1	WG2001306
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2001306
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2001306
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2001306
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0245	0.0992		1	WG2001306
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2001306
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2001306
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2001306
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2001306
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2001306
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2001306
Ethylbenzene	100-41-4	106	0.0300	0.130	0.124	0.538		1	WG2001306
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2001306
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0331	0.225		1	WG2001306
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2001306
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2001306
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2001306
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2001306
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2001306
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*105*				WG2001306

Method Blank (MB)

(MB) R3888077-3 02/06/23 11:22

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Benzene	U		0.0112	0.0200
Carbon tetrachloride	U		0.00995	0.0200
Chloroethane	U		0.00944	0.0400
Chloroform	U		0.00729	0.0200
Chloromethane	U		0.0162	0.0300
1,2-Dibromoethane	U		0.00779	0.0200
1,4-Dichlorobenzene	U		0.00691	0.0200
1,1-Dichloroethane	U		0.00893	0.0200
1,2-Dichloroethane	U		0.000471	0.0200
1,1-Dichloroethene	U		0.00921	0.0200
cis-1,2-Dichloroethene	U		0.0142	0.0200
trans-1,2-Dichloroethene	U		0.00499	0.0200
1,2-Dichloropropane	U		0.00885	0.0300
cis-1,3-Dichloropropene	U		0.00735	0.0200
trans-1,3-Dichloropropene	U		0.00711	0.0300
Ethylbenzene	U		0.0126	0.0300
1,1,2,2-Tetrachloroethane	U		0.00874	0.0200
Tetrachloroethylene	U		0.0127	0.0200
1,1,1-Trichloroethane	U		0.00649	0.0200
1,1,2-Trichloroethane	U		0.00583	0.0300
Trichloroethylene	U		0.00746	0.0200
Vinyl chloride	U		0.00765	0.0200
Vinyl acetate	U		0.0111	0.0200
(S) 1,4-Bromofluorobenzene	*92.9*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3888077-1 02/06/23 10:05 • (LCSD) R3888077-2 02/06/23 10:45

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.592	0.567	118	113	70.0-130			4.31	25
Carbon tetrachloride	0.500	0.569	0.565	114	113	70.0-130			0.705	25
Chloroethane	0.500	0.505	0.522	101	104	70.0-130			3.31	25
Chloroform	0.500	0.489	0.496	97.8	99.2	70.0-130			1.42	25
Chloromethane	0.500	0.511	0.510	102	102	70.0-130			0.196	25
1,2-Dibromoethane	0.500	0.626	0.547	125	109	70.0-130			13.5	25
1,4-Dichlorobenzene	0.500	0.576	0.583	115	117	70.0-130			1.21	25
1,1-Dichloroethane	0.500	0.499	0.490	99.8	98.0	70.0-130			1.82	25
1,2-Dichloroethane	0.500	0.491	0.489	98.2	97.8	70.0-130			0.408	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3888077-1 02/06/23 10:05 • (LCSD) R3888077-2 02/06/23 10:45

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.500	0.514	0.506	103	101	70.0-130			1.57	25
cis-1,2-Dichloroethene	0.500	0.470	0.510	94.0	102	70.0-130			8.16	25
trans-1,2-Dichloroethene	0.500	0.501	0.502	100	100	70.0-130			0.199	25
1,2-Dichloropropane	0.500	0.506	0.503	101	101	70.0-130			0.595	25
cis-1,3-Dichloropropene	0.500	0.523	0.614	105	123	70.0-130			16.0	25
trans-1,3-Dichloropropene	0.500	0.485	0.482	97.0	96.4	70.0-130			0.620	25
Ethylbenzene	0.500	0.489	0.488	97.8	97.6	70.0-130			0.205	25
1,1,2,2-Tetrachloroethane	0.500	0.552	0.547	110	109	70.0-130			0.910	25
Tetrachloroethylene	0.500	0.543	0.535	109	107	70.0-130			1.48	25
1,1,1-Trichloroethane	0.500	0.497	0.492	99.4	98.4	70.0-130			1.01	25
1,1,2-Trichloroethane	0.500	0.543	0.523	109	105	70.0-130			3.75	25
Trichloroethylene	0.500	0.559	0.626	112	125	70.0-130			11.3	25
Vinyl chloride	0.500	0.563	0.541	113	108	70.0-130			3.99	25
Vinyl acetate	0.500	0.520	0.510	104	102	70.0-130			1.94	25
(S) 1,4-Bromofluorobenzene				*99.1*	*98.5*	*60.0-140*				

Method Blank (MB)

(MB) R3888497-3 02/07/23 10:51

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Benzene	U		0.0112	0.0200
Carbon tetrachloride	U		0.00995	0.0200
Chloroethane	U		0.00944	0.0400
Chloroform	U		0.00729	0.0200
Chloromethane	U		0.0162	0.0300
1,2-Dibromoethane	U		0.00779	0.0200
1,4-Dichlorobenzene	U		0.00691	0.0200
1,1-Dichloroethane	U		0.00893	0.0200
1,2-Dichloroethane	U		0.000471	0.0200
1,1-Dichloroethene	U		0.00921	0.0200
cis-1,2-Dichloroethene	U		0.0142	0.0200
trans-1,2-Dichloroethene	U		0.00499	0.0200
1,2-Dichloropropane	U		0.00885	0.0300
cis-1,3-Dichloropropene	U		0.00735	0.0200
trans-1,3-Dichloropropene	U		0.00711	0.0300
Ethylbenzene	U		0.0126	0.0300
1,1,2,2-Tetrachloroethane	U		0.00874	0.0200
Tetrachloroethylene	U		0.0127	0.0200
1,1,1-Trichloroethane	U		0.00649	0.0200
1,1,2-Trichloroethane	U		0.00583	0.0300
Trichloroethylene	U		0.00746	0.0200
Vinyl chloride	U		0.00765	0.0200
Vinyl acetate	U		0.0111	0.0200
(S) 1,4-Bromofluorobenzene	*94.3*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3888497-1 02/07/23 09:31 • (LCSD) R3888497-2 02/07/23 10:12

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.469	0.467	93.8	93.4	70.0-130			0.427	25
Carbon tetrachloride	0.500	0.491	0.507	98.2	101	70.0-130			3.21	25
Chloroethane	0.500	0.482	0.476	96.4	95.2	70.0-130			1.25	25
Chloroform	0.500	0.493	0.489	98.6	97.8	70.0-130			0.815	25
Chloromethane	0.500	0.470	0.464	94.0	92.8	70.0-130			1.28	25
1,2-Dibromoethane	0.500	0.488	0.477	97.6	95.4	70.0-130			2.28	25
1,4-Dichlorobenzene	0.500	0.535	0.529	107	106	70.0-130			1.13	25
1,1-Dichloroethane	0.500	0.492	0.488	98.4	97.6	70.0-130			0.816	25
1,2-Dichloroethane	0.500	0.516	0.494	103	98.8	70.0-130			4.36	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3888497-1 02/07/23 09:31 • (LCSD) R3888497-2 02/07/23 10:12

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.500	0.486	0.481	97.2	96.2	70.0-130			1.03	25
cis-1,2-Dichloroethene	0.500	0.481	0.480	96.2	96.0	70.0-130			0.208	25
trans-1,2-Dichloroethene	0.500	0.491	0.486	98.2	97.2	70.0-130			1.02	25
1,2-Dichloropropane	0.500	0.501	0.493	100	98.6	70.0-130			1.61	25
cis-1,3-Dichloropropene	0.500	0.479	0.475	95.8	95.0	70.0-130			0.839	25
trans-1,3-Dichloropropene	0.500	0.483	0.473	96.6	94.6	70.0-130			2.09	25
Ethylbenzene	0.500	0.512	0.504	102	101	70.0-130			1.57	25
1,1,2,2-Tetrachloroethane	0.500	0.502	0.499	100	99.8	70.0-130			0.599	25
Tetrachloroethylene	0.500	0.498	0.486	99.6	97.2	70.0-130			2.44	25
1,1,1-Trichloroethane	0.500	0.489	0.484	97.8	96.8	70.0-130			1.03	25
1,1,2-Trichloroethane	0.500	0.492	0.482	98.4	96.4	70.0-130			2.05	25
Trichloroethylene	0.500	0.488	0.483	97.6	96.6	70.0-130			1.03	25
Vinyl chloride	0.500	0.490	0.493	98.0	98.6	70.0-130			0.610	25
Vinyl acetate	0.500	0.489	0.478	97.8	95.6	70.0-130			2.28	25
(S) 1,4-Bromofluorobenzene				*102*	*101*	*60.0-140*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1,6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1,4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address: **RMD Environmental - Walnut Creek, CA** 1371 Oakland Blvd. Suite 200	Billing Information: Accounts Payable 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596
Report To: Erin Male	Email To: linouye@rmdes.net;emale@rmdes.net
Project Description: Police Credit Union	City/State Collected: San Francisco, CA — Please Circle: PT MT CT ET
Phone: 415-571-6627	Client Project #: 01-DTSC-007 — Lab Project #: RMDENVPHCA-01DTSC007
Collected by (print): Brendan Englert	Site/Facility ID #: — P.O. #:
Collected by (signature):	Rush? (Lab MUST Be Notified) ___ Same Day ___ Next Day ___ Two Day ___ Three Day ___ Five Day — Date Results Needed: Standard TAT

Chain of Custody Page 1 of 2

Pace® PEOPLE ADVANCING SCIENCE
MT JULIET, TN
12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1582384
K100
Acctnum: RMDENVPHCA
Template: T204372
Prelogin: P968419
PM: 3828 - Jennifer A McCurdy
PB: CW 01/05/23
Shipped Via: FedEX Ground

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	TO-15, HELIUM Summa	TO-15SIM Summa	HOLD		Rem./Contaminant	Sample # (lab only)
IAQ-1271-3	10983	22735	02/02/23	0803	-29	-5		✓				-01
OAA-4	11271	22175		0808	-29	-5		✓				-02
IAQ-1271-2	12128	6765		0811	-30	0		✓				-03
IAQ-1271-1	8039	6359		~~0806~~ 0813	-28	-5		✓				-04
IAQ-1271-DUP	10816	22743		0813	-30	-8		✓				-05
IAQ-1281-2	7937	6447		~~0925~~ 0844	-29	-5		✓				-06
IAQ-1281-1	7943	11796		0927	-30	-5		✓				-07
IAQ-1284-2	~~11652~~ 8008	~~9450~~ 22558		0843	-28	-22		~~✓~~	✓			-08
IAQ-1284-3	6567	6330		0918	-29	-5		✓				-09
IAQ-1284-1	11159	21275		~~1000~~ 0915	-30	-7		✓				-10

Remarks:

Samples returned via: __ UPS __ FedEx X Courier ______

Tracking #

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	02/03/23	1101			
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 2/4/23	Time: 1020

Condition: (lab use only)

COC Seal Intact: ___Y ___N ___NA

NCF:

Company Name/Address:	Billing Information:	Analysis	Chain of Custody Page 2 of 2
RMD Environmental - Walnut Creek, CA 1371 Oakland Blvd. Suite 200	Accounts Payable 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596	TO-15, HELIUM Summa TO-15SIM Summa	Pace® PEOPLE ADVANCING SCIENCE MT JULIET, TN 12065 Lebanon Road Mt Juliet, TN 37122 Phone: 615-758-5858 Alt: 800-767-5859 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Report To: **Erin Male**		Email To: linouye@rmdes.net;emale@rmdes.net	
Project Description: **Police Credit Union**	City/State Collected: San Francisco, CA		Please Circle: PT MT CT ET
Phone: **415-571-6627**	Client Project # **01-DTSC-007**	Lab Project # **RMDENVPHCA-01DTSC007**	SDG # L1582384
Collected by (print): Brendan Englert	Site/Facility ID #	P.O. #	Table #
Collected by (signature):	Rush? (Lab MUST Be Notified) ___ Same Day ___ Three Day ___ Next Day ___ Five Day ___ Two Day	Date Results Needed Standard TAT	Acctnum: **RMDENVPHCA** Template: **T204372** Prelogin: **P968419** PM: 3828 - Jennifer A McCurdy PB: CSL 01/03/23 Shipped Via: **FedEX Ground**

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	TO-15, HELIUM Summa	TO-15SIM Summa			Rem./Contaminant	Sample # (lab only)
OAA-5	10849	6706	02/02/23	BE ~~1003~~ 0928	-29	-5		✓				-11
IAQ-1276-2	21528	22727	02/02/23	BE ~~1018~~ 0942	-29	-5		✓				-12
IAQ-1276-1	11063	22725		BE ~~1023~~ 0945	-30	-8		✓				-13
OAA-6	10443	22742		BE ~~1030~~ 0950	-29	-3		✓				-14
IAQ-1280-2	10846	5888		BE ~~[illegible]~~ 1216	-29	-8		✓				-15
IAQ-1280-1	21113	22741		BE ~~1310~~ 1218	-30	0		✓				
IAQ-1281-3	11052	9450		0845	-30	-5		✓				-16
IAQ-1275-2	11062	5320		1445	-30	-6		✓				
IAQ-1275-1	12415	27819		1447	-29	-5		✓				
IAQ-1275-3	10870	5097		1446	-30	-5		✓				

Remarks:

			Samples returned via: __ UPS __ FedEx X Courier _____	Tracking #	Hold #
Relinquished by : (Signature)	Date: 02/03/23	Time: 1101	Received by: (Signature)	Date: Time:	Condition: (lab use only)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date: Time:	COC Seal Intact: ___Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 2/4/23 Time: 1023	NCF:

ANALYTICAL REPORT

February 21, 2023

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

RMD Environmental - Walnut Creek, CA

Sample Delivery Group:	L1587242
Samples Received:	02/18/2023
Project Number:	01-DTSC-007
Description:	Police Credit Union
Report To:	Ivy Inouye 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596

Entire Report Reviewed By:

Jennifer A McCurdy
Project Manager

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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1 Cp
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3 Ss
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7 Qc
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9 Al
10 Sc

IAQ-1284-1 L1587242-01 Air

Collected by	Collected date/time	Received date/time
	02/17/23 16:10	02/18/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2009318	1	02/20/23 16:53	02/20/23 16:53	DBB	Mt. Juliet, TN

IAQ-1284-2 L1587242-02 Air

Collected by	Collected date/time	Received date/time
	02/17/23 14:05	02/18/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2008837	1	02/19/23 23:26	02/19/23 23:26	CEP	Mt. Juliet, TN

OAA-5 L1587242-03 Air

Collected by	Collected date/time	Received date/time
	02/17/23 13:39	02/18/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2008837	1	02/20/23 00:07	02/20/23 00:07	CEP	Mt. Juliet, TN

IAQ-1275-1 L1587242-04 Air

Collected by	Collected date/time	Received date/time
	02/17/23 14:34	02/18/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2008837	1	02/20/23 00:47	02/20/23 00:47	CEP	Mt. Juliet, TN

IAQ-1275-2 L1587242-05 Air

Collected by	Collected date/time	Received date/time
	02/17/23 14:54	02/18/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2008837	1	02/20/23 01:27	02/20/23 01:27	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2009318	10	02/20/23 15:01	02/20/23 15:01	DBB	Mt. Juliet, TN

IAQ-1275-3 L1587242-06 Air

Collected by	Collected date/time	Received date/time
	02/17/23 16:00	02/18/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15-SIM	WG2008837	1	02/20/23 02:09	02/20/23 02:09	CEP	Mt. Juliet, TN

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jennifer McCurdy

Jennifer A McCurdy
Project Manager

Volatile Organic Compounds (MS) by Method TO-15-SIM

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
IAQ-1284-1	L1587242-01	Benzene	71-43-2	78.10	0.0200	0.0639	0.231	0.738		1	WG2009318
IAQ-1284-1	L1587242-01	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0789	0.497		1	WG2009318
IAQ-1284-1	L1587242-01	Chloroform	67-66-3	119	0.0200	0.0973	0.450	2.19		1	WG2009318
IAQ-1284-1	L1587242-01	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.921	1.90		1	WG2009318
IAQ-1284-1	L1587242-01	1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0200	0.120		1	WG2009318
IAQ-1284-1	L1587242-01	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.202	0.818		1	WG2009318
IAQ-1284-1	L1587242-01	Ethylbenzene	100-41-4	106	0.0300	0.130	0.113	0.490		1	WG2009318
IAQ-1284-1	L1587242-01	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.114	0.774		1	WG2009318
IAQ-1284-2	L1587242-02	Benzene	71-43-2	78.10	0.0200	0.0639	0.205	0.655		1	WG2008837
IAQ-1284-2	L1587242-02	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0791	0.498		1	WG2008837
IAQ-1284-2	L1587242-02	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.829	1.71		1	WG2008837
IAQ-1284-2	L1587242-02	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0703	0.285		1	WG2008837
IAQ-1284-2	L1587242-02	Ethylbenzene	100-41-4	106	0.0300	0.130	0.181	0.785		1	WG2008837
IAQ-1284-2	L1587242-02	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0646	0.439		1	WG2008837
IAQ-1284-2	L1587242-02	Vinyl acetate	108-05-4	86.10	0.0200	0.0704	0.0250	0.0880		1	WG2008837
OAA-5	L1587242-03	Benzene	71-43-2	78.10	0.0200	0.0639	0.211	0.674		1	WG2008837
OAA-5	L1587242-03	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0762	0.480		1	WG2008837
OAA-5	L1587242-03	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.614	1.27		1	WG2008837
OAA-5	L1587242-03	Ethylbenzene	100-41-4	106	0.0300	0.130	0.0490	0.212		1	WG2008837
IAQ-1275-1	L1587242-04	Benzene	71-43-2	78.10	0.0200	0.0639	0.396	1.26		1	WG2008837
IAQ-1275-1	L1587242-04	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0769	0.484		1	WG2008837
IAQ-1275-1	L1587242-04	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.719	1.49		1	WG2008837
IAQ-1275-1	L1587242-04	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0273	0.111		1	WG2008837
IAQ-1275-1	L1587242-04	Ethylbenzene	100-41-4	106	0.0300	0.130	0.178	0.772		1	WG2008837
IAQ-1275-1	L1587242-04	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0406	0.276		1	WG2008837
IAQ-1275-2	L1587242-05	Benzene	71-43-2	78.10	0.0200	0.0639	0.357	1.14		1	WG2008837
IAQ-1275-2	L1587242-05	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0760	0.479		1	WG2008837
IAQ-1275-2	L1587242-05	Chloroform	67-66-3	119	0.200	0.973	24.9	121		10	WG2009318
IAQ-1275-2	L1587242-05	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.839	1.73		1	WG2008837
IAQ-1275-2	L1587242-05	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0835	0.338		1	WG2008837
IAQ-1275-2	L1587242-05	Ethylbenzene	100-41-4	106	0.0300	0.130	0.148	0.642		1	WG2008837
IAQ-1275-2	L1587242-05	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.164	1.11		1	WG2008837
IAQ-1275-3	L1587242-06	Benzene	71-43-2	78.10	0.0200	0.0639	0.415	1.33		1	WG2008837
IAQ-1275-3	L1587242-06	Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0750	0.472		1	WG2008837
IAQ-1275-3	L1587242-06	Chloromethane	74-87-3	50.50	0.0300	0.0620	0.663	1.37		1	WG2008837
IAQ-1275-3	L1587242-06	1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0267	0.108		1	WG2008837
IAQ-1275-3	L1587242-06	Ethylbenzene	100-41-4	106	0.0300	0.130	0.165	0.715		1	WG2008837
IAQ-1275-3	L1587242-06	Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0371	0.252		1	WG2008837

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.231	0.738		1	WG2009318
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0789	0.497		1	WG2009318
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2009318
Chloroform	67-66-3	119	0.0200	0.0973	0.450	2.19		1	WG2009318
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.921	1.90		1	WG2009318
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2009318
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	0.0200	0.120		1	WG2009318
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2009318
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.202	0.818		1	WG2009318
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2009318
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2009318
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2009318
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2009318
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2009318
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2009318
Ethylbenzene	100-41-4	106	0.0300	0.130	0.113	0.490		1	WG2009318
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2009318
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.114	0.774		1	WG2009318
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2009318
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2009318
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2009318
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2009318
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2009318
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*119*				WG2009318

Cp Tc Ss Cn Ds Sr Qc Gl Al Sc

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Benzene	71-43-2	78.10	0.0200	0.0639	0.205	0.655		1	WG2008837
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0791	0.498		1	WG2008837
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2008837
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2008837
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.829	1.71		1	WG2008837
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2008837
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2008837
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2008837
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0703	0.285		1	WG2008837
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2008837
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2008837
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2008837
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2008837
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2008837
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2008837
Ethylbenzene	100-41-4	106	0.0300	0.130	0.181	0.785		1	WG2008837
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2008837
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0646	0.439		1	WG2008837
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2008837
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2008837
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2008837
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2008837
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	0.0250	0.0880		1	WG2008837
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*111*				WG2008837

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.211	0.674		1	WG2008837
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0762	0.480		1	WG2008837
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2008837
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2008837
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.614	1.27		1	WG2008837
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2008837
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2008837
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2008837
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	ND	ND		1	WG2008837
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2008837
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2008837
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2008837
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2008837
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2008837
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2008837
Ethylbenzene	100-41-4	106	0.0300	0.130	0.0490	0.212		1	WG2008837
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2008837
Tetrachloroethylene	127-18-4	166	0.0200	0.136	ND	ND		1	WG2008837
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2008837
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2008837
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2008837
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2008837
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2008837
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG2008837

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.396	1.26		1	WG2008837
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0769	0.484		1	WG2008837
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2008837
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2008837
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.719	1.49		1	WG2008837
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2008837
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2008837
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2008837
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0273	0.111		1	WG2008837
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2008837
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2008837
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2008837
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2008837
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2008837
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2008837
Ethylbenzene	100-41-4	106	0.0300	0.130	0.178	0.772		1	WG2008837
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2008837
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0406	0.276		1	WG2008837
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2008837
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2008837
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2008837
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2008837
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2008837
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*112*				WG2008837

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.357	1.14		1	WG2008837
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0760	0.479		1	WG2008837
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2008837
Chloroform	67-66-3	119	0.200	0.973	24.9	121		10	WG2009318
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.839	1.73		1	WG2008837
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2008837
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2008837
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2008837
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0835	0.338		1	WG2008837
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2008837
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2008837
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2008837
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2008837
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2008837
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2008837
Ethylbenzene	100-41-4	106	0.0300	0.130	0.148	0.642		1	WG2008837
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2008837
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.164	1.11		1	WG2008837
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2008837
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2008837
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2008837
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2008837
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2008837
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*110*				WG2008837
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*105*				WG2009318

Volatile Organic Compounds (MS) by Method TO-15-SIM

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Benzene	71-43-2	78.10	0.0200	0.0639	0.415	1.33		1	WG2008837
Carbon tetrachloride	56-23-5	154	0.0200	0.126	0.0750	0.472		1	WG2008837
Chloroethane	75-00-3	64.50	0.0400	0.106	ND	ND		1	WG2008837
Chloroform	67-66-3	119	0.0200	0.0973	ND	ND		1	WG2008837
Chloromethane	74-87-3	50.50	0.0300	0.0620	0.663	1.37		1	WG2008837
1,2-Dibromoethane	106-93-4	188	0.0200	0.154	ND	ND		1	WG2008837
1,4-Dichlorobenzene	106-46-7	147	0.0200	0.120	ND	ND		1	WG2008837
1,1-Dichloroethane	75-34-3	98	0.0200	0.0802	ND	ND		1	WG2008837
1,2-Dichloroethane	107-06-2	99	0.0200	0.0810	0.0267	0.108		1	WG2008837
1,1-Dichloroethene	75-35-4	96.90	0.0200	0.0793	ND	ND		1	WG2008837
cis-1,2-Dichloroethene	156-59-2	96.90	0.0200	0.0793	ND	ND		1	WG2008837
trans-1,2-Dichloroethene	156-60-5	96.90	0.0200	0.0793	ND	ND		1	WG2008837
1,2-Dichloropropane	78-87-5	113	0.0300	0.139	ND	ND		1	WG2008837
cis-1,3-Dichloropropene	10061-01-5	111	0.0200	0.0908	ND	ND		1	WG2008837
trans-1,3-Dichloropropene	10061-02-6	111	0.0300	0.136	ND	ND		1	WG2008837
Ethylbenzene	100-41-4	106	0.0300	0.130	0.165	0.715		1	WG2008837
1,1,2,2-Tetrachloroethane	79-34-5	168	0.0200	0.137	ND	ND		1	WG2008837
Tetrachloroethylene	127-18-4	166	0.0200	0.136	0.0371	0.252		1	WG2008837
1,1,1-Trichloroethane	71-55-6	133	0.0200	0.109	ND	ND		1	WG2008837
1,1,2-Trichloroethane	79-00-5	133	0.0300	0.163	ND	ND		1	WG2008837
Trichloroethylene	79-01-6	131	0.0200	0.107	ND	ND		1	WG2008837
Vinyl chloride	75-01-4	62.50	0.0200	0.0511	ND	ND		1	WG2008837
Vinyl acetate	108-05-4	86.10	0.0200	0.0704	ND	ND		1	WG2008837
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*110*				WG2008837

Method Blank (MB)

(MB) R3892589-3 02/19/23 11:16

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Benzene	U		0.0112	0.0200
Carbon tetrachloride	U		0.00995	0.0200
Chloroethane	U		0.00944	0.0400
Chloroform	U		0.00729	0.0200
Chloromethane	U		0.0162	0.0300
1,2-Dibromoethane	U		0.00779	0.0200
1,4-Dichlorobenzene	U		0.00691	0.0200
1,1-Dichloroethane	U		0.00893	0.0200
1,2-Dichloroethane	U		0.000471	0.0200
1,1-Dichloroethene	U		0.00921	0.0200
cis-1,2-Dichloroethene	U		0.0142	0.0200
trans-1,2-Dichloroethene	U		0.00499	0.0200
1,2-Dichloropropane	U		0.00885	0.0300
cis-1,3-Dichloropropene	U		0.00735	0.0200
trans-1,3-Dichloropropene	U		0.00711	0.0300
Ethylbenzene	U		0.0126	0.0300
1,1,2,2-Tetrachloroethane	U		0.00874	0.0200
Tetrachloroethylene	U		0.0127	0.0200
1,1,1-Trichloroethane	U		0.00649	0.0200
1,1,2-Trichloroethane	U		0.00583	0.0300
Trichloroethylene	U		0.00746	0.0200
Vinyl chloride	U		0.00765	0.0200
Vinyl acetate	U		0.0111	0.0200
(S) 1,4-Bromofluorobenzene	*98.4*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3892589-1 02/19/23 09:53 • (LCSD) R3892589-2 02/19/23 10:36

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.529	0.524	106	105	70.0-130			0.950	25
Carbon tetrachloride	0.500	0.538	0.532	108	106	70.0-130			1.12	25
Chloroethane	0.500	0.598	0.598	120	120	70.0-130			0.000	25
Chloroform	0.500	0.547	0.546	109	109	70.0-130			0.183	25
Chloromethane	0.500	0.519	0.515	104	103	70.0-130			0.774	25
1,2-Dibromoethane	0.500	0.535	0.504	107	101	70.0-130			5.97	25
1,4-Dichlorobenzene	0.500	0.542	0.576	108	115	70.0-130			6.08	25
1,1-Dichloroethane	0.500	0.556	0.554	111	111	70.0-130			0.360	25
1,2-Dichloroethane	0.500	0.564	0.563	113	113	70.0-130			0.177	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3892589-1 02/19/23 09:53 • (LCSD) R3892589-2 02/19/23 10:36

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.500	0.539	0.542	108	108	70.0-130			0.555	25
cis-1,2-Dichloroethene	0.500	0.522	0.523	104	105	70.0-130			0.191	25
trans-1,2-Dichloroethene	0.500	0.534	0.534	107	107	70.0-130			0.000	25
1,2-Dichloropropane	0.500	0.573	0.566	115	113	70.0-130			1.23	25
cis-1,3-Dichloropropene	0.500	0.521	0.501	104	100	70.0-130			3.91	25
trans-1,3-Dichloropropene	0.500	0.526	0.502	105	100	70.0-130			4.67	25
Ethylbenzene	0.500	0.535	0.534	107	107	70.0-130			0.187	25
1,1,2,2-Tetrachloroethane	0.500	0.539	0.550	108	110	70.0-130			2.02	25
Tetrachloroethylene	0.500	0.518	0.506	104	101	70.0-130			2.34	25
1,1,1-Trichloroethane	0.500	0.541	0.539	108	108	70.0-130			0.370	25
1,1,2-Trichloroethane	0.500	0.547	0.531	109	106	70.0-130			2.97	25
Trichloroethylene	0.500	0.543	0.539	109	108	70.0-130			0.739	25
Vinyl chloride	0.500	0.573	0.577	115	115	70.0-130			0.696	25
Vinyl acetate	0.500	0.502	0.503	100	101	70.0-130			0.199	25
(S) 1,4-Bromofluorobenzene				*99.0*	*106*	*60.0-140*				

Method Blank (MB)

(MB) R3892969-3 02/20/23 11:01

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Benzene	U		0.0112	0.0200
Carbon tetrachloride	U		0.00995	0.0200
Chloroethane	U		0.00944	0.0400
Chloroform	U		0.00729	0.0200
Chloromethane	U		0.0162	0.0300
1,2-Dibromoethane	U		0.00779	0.0200
1,4-Dichlorobenzene	U		0.00691	0.0200
1,1-Dichloroethane	U		0.00893	0.0200
1,2-Dichloroethane	U		0.000471	0.0200
1,1-Dichloroethene	U		0.00921	0.0200
cis-1,2-Dichloroethene	U		0.0142	0.0200
trans-1,2-Dichloroethene	U		0.00499	0.0200
1,2-Dichloropropane	U		0.00885	0.0300
cis-1,3-Dichloropropene	U		0.00735	0.0200
trans-1,3-Dichloropropene	U		0.00711	0.0300
Ethylbenzene	U		0.0126	0.0300
1,1,2,2-Tetrachloroethane	U		0.00874	0.0200
Tetrachloroethylene	U		0.0127	0.0200
1,1,1-Trichloroethane	U		0.00649	0.0200
1,1,2-Trichloroethane	U		0.00583	0.0300
Trichloroethylene	U		0.00746	0.0200
Vinyl chloride	U		0.00765	0.0200
Vinyl acetate	U		0.0111	0.0200
(S) 1,4-Bromofluorobenzene	*90.9*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3892969-1 02/20/23 09:38 • (LCSD) R3892969-2 02/20/23 10:22

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.500	0.551	0.545	110	109	70.0-130			1.09	25
Carbon tetrachloride	0.500	0.543	0.551	109	110	70.0-130			1.46	25
Chloroethane	0.500	0.586	0.567	117	113	70.0-130			3.30	25
Chloroform	0.500	0.569	0.565	114	113	70.0-130			0.705	25
Chloromethane	0.500	0.541	0.537	108	107	70.0-130			0.742	25
1,2-Dibromoethane	0.500	0.556	0.549	111	110	70.0-130			1.27	25
1,4-Dichlorobenzene	0.500	0.543	0.527	109	105	70.0-130			2.99	25
1,1-Dichloroethane	0.500	0.578	0.574	116	115	70.0-130			0.694	25
1,2-Dichloroethane	0.500	0.584	0.584	117	117	70.0-130			0.000	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3892969-1 02/20/23 09:38 • (LCSD) R3892969-2 02/20/23 10:22

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.500	0.562	0.561	112	112	70.0-130			0.178	25
cis-1,2-Dichloroethene	0.500	0.539	0.547	108	109	70.0-130			1.47	25
trans-1,2-Dichloroethene	0.500	0.557	0.556	111	111	70.0-130			0.180	25
1,2-Dichloropropane	0.500	0.593	0.587	119	117	70.0-130			1.02	25
cis-1,3-Dichloropropene	0.500	0.542	0.544	108	109	70.0-130			0.368	25
trans-1,3-Dichloropropene	0.500	0.550	0.546	110	109	70.0-130			0.730	25
Ethylbenzene	0.500	0.548	0.545	110	109	70.0-130			0.549	25
1,1,2,2-Tetrachloroethane	0.500	0.559	0.550	112	110	70.0-130			1.62	25
Tetrachloroethylene	0.500	0.533	0.522	107	104	70.0-130			2.09	25
1,1,1-Trichloroethane	0.500	0.562	0.557	112	111	70.0-130			0.894	25
1,1,2-Trichloroethane	0.500	0.565	0.557	113	111	70.0-130			1.43	25
Trichloroethylene	0.500	0.558	0.554	112	111	70.0-130			0.719	25
Vinyl chloride	0.500	0.569	0.573	114	115	70.0-130			0.701	25
Vinyl acetate	0.500	0.539	0.538	108	108	70.0-130			0.186	25
(S) 1,4-Bromofluorobenzene				*98.8*	*98.8*	*60.0-140*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:	Billing Information:
RMD Environmental - Walnut Creek, CA 1371 Oakland Blvd. Suite 200	Accounts Payable 1371 Oakland Blvd. Suite 200 Walnut Creek, CA 94596
Report To: Ivy Inouye	Email To: iinouye@rmdes.net;emale@rmdes.net

Project Description: Police Credit Union | City/State Collected: SAN FRANCISCO, CA | Please Circle: PT MT CT ET

Phone: 415-571-6627 | Client Project # 01-DTSC-007 | Lab Project # RMDENVPHCA-01DTSC007

Collected by (print): E. Mile | Site/Facility ID # | P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Three Day
___ Next Day ___ Five Day
___ Two Day

Date Results Needed: STANDARD TAT

Chain of Custody Page 1 of 1

Pace® PEOPLE ADVANCING SCIENCE
MT JULIET, TN

12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1567242
I071

Acctnum: RMDENVPHCA
Template: T204372
Prelogin: P979769
PM: 3828 - Jennifer A McCurdy
PB: CSL 02/13/23
Shipped Via: FedEX Ground

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	TO-15SIM Summa	HOLD SAMPLE			Rem./Contaminant	Sample # (lab only)
~~FZ~~ IAQ-1284-1	012072	022743	2-17-23	1610	-30	-16	~~X~~	X				-01
IAQ-1284-2	012229	022742		1405	-29.5	-7.5	X					-02
OAA-5	012184	006330		1339	-28	-3.5						-03
IAQ-1275-1	006936	022581		1434	-29	0						-04
IAQ-1275-2	009309	022173		1454	-29.5	-5.5						-05
IAQ-1275-3	012191	021275		1600	-30+	-8						-06
~~OAA-7~~	~~010850~~	~~022725~~			~~-30+~~	~~-18.5~~	DO NOT ANALYZE					
EM 2/17												

Remarks:

Sample Receipt Checklist
COC Seal Present/Intact: _Y_ N
COC Signed/Accurate: _Y_ N
Bottles arrive intact: _Y_ N
Correct bottles used: _Y_ N
Sufficient volume sent: _Y_ N
RAD Screen <0.5 mR/hr: _Y_ N
If Applicable
VOA Zero Headspace: _Y_ N
Pres.Correct/Check: _Y_ N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	
	2/17/23	1620				Via: ___ Courier ___ Tracking # ___ Hold #
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	Condition: (lab use only)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 2/18/23	Time: 0900	COC Seal Intact: ___Y ___N ___NA NCF:

From:	Erin Male
To:	Jennifer Mccurdy; Ivy Inouye; Erin Male
Subject:	Re: Pace Analytical National Login for 01-DTSC-007 Police Credit Union L1587242
Date:	Sunday, February 19, 2023 10:36:42 AM

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Jen,

Please take sample IAQ-1284-1 L1587242-01 off hold and analyze for TO-15 Sim like the other samples.

Thank you

Erin Male
Project Geologist
RMD Environmental Solutions/Citadel EHS

Sent from 415-571-6627

From: Jennifer A McCurdy <Jennifer.McCurdy@pacelabs.com>
Sent: Saturday, February 18, 2023 11:55:17 PM
To: iinouye@rmdes.net <iinouye@rmdes.net>; emale@rmdes.net <emale@rmdes.net>
Subject: Pace Analytical National Login for 01-DTSC-007 Police Credit Union L1587242

CAUTION: This email originated from outside of the organization! Do not click links, open attachments or reply, unless you recognize the sender's email address and know the content is safe!

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EXHIBIT B

DTSC Desk-Top Study

EXHIBIT C

Table 4. PCE CONCENTRATIONS IN INDOOR AIR AND ESTIMATED RISKS

The 2550 Irving Street Site

San Francisco, California

Address	PCE Concentration Range ($\mu g/m^3$)[a]	Mean PCE Concentration ($\mu g/m^3$)[b]	# Samples > SL[c]	PCE Residential Inhalation Risk[d]	Notes	Empirical AF, March 2022*	Empirical AF, February 2023*
1271 26th Avenue	0.151 - 0.264	0.204	0	4.E-07	Highest concentrations in September 2021. All samples screened out after removing consumer products.	0.003	0.005
1275 26th Avenue	0.276 - 2.010	1.147	3	2.E-06	Exceedances consistently on upper floor, including September 2021. Ground floor exceedance only in March 2022.	0.027	0.003
1281 26th Avenue	0.232 - 1.230	0.686	2	1.E-06	TCE Upstairs 5.47 $\mu g/m^3$ in March 2022. PCE results consistent with VI pathway.	0.007	0.002
1276 27th Avenue	0.164 - 1.910	0.620	1	1.E-06	PCE exceedances inconsistent by floor and are data outliers.	0.020	0.003
1280 27th Avenue	0.346 - 0.540	0.410	1	9.E-07	PCE results consistent with VI pathway.	0.004	0.006
1284 27th Avenue	0.439 - 0.978	0.678	3	1.E-06	PCE results consistent with VI pathway. March 2022 outdoor air sample exceeded residential SL.	0.011	0.009

<u>Notes</u>:

a Lowest and highest concentrations from the March 2022 and February 2023 indoor air results from (Sampling events conducted by DTSC and RMD.)

b Mean of 4 samples: upstairs and downstairs samples (2) and corresponding seasonal replicates (2)

c Of 4 seasonal pair samples

d Risk assessed by dividing mean concentration by HHRA Note 3 residential air screening level and multiplying by 10^{-6}. Reported to one significant figure.

$\mu g/m^3$ = micrograms per cubic meter

> = greater than

= number

PCE = tetrachloroethene

*Empirical attenuation factors (AFs) are calculated by dividing the highest ground floor indoor air concentration by the concurrent external 5 foot depth soil vapor. For 1271 26th Avenue, the subslab vapor concentration was used in lieu of soil vapor.

Permit Holder's Response Brief to the Rehearing Request

Farella Braun + Martel

CHARLES J. HIGLEY
cjhigley@fbm.com
D 415.954.4942

September 7, 2023

Via E-Mail

Julie Rosenberg, Executive Director
San Francisco Board of Appeals
49 South Van Ness Avenue, Suite 1475
San Francisco, CA 94013
boardofappeals@sfgov.org
julie.rosenberg@sfgov.org

Re: **Permit Holder's Brief in Opposition to Rehearing Request**
Appeal No. 22-034
Hearing Date: September 13, 2023
Permit No. 2022/05/05/3630

Dear Director Rosenberg:

This firm represents 2550 Irving Associates LP ("**TNDC**"), the sponsor of the proposed affordable housing project (the **"Project**") located at 2550 Irving Street in San Francisco (the "**Project Site**"), and the applicant and holder of Site Permit No. 2022/0505/3630 (the "**Permit**"). On July 11, 2023, Mid-Sunset Neighborhood Association, Inc. ("**MSNA**" or "**Appellant**") appealed the issuance of the Permit. On July 28, 2023, MSNA filed a lengthy brief in support of its appeal, in which it made substantially the same arguments it now makes for a rehearing. On August __, 2023, the Board of Appeals (the "**Board**") denied MSNA's appeal after hearing hours of testimony from the Appellant, the Department of Building Inspection ("**DBI**"), the Department of Toxic Substances Control ("**DTSC**"), the Department of Public Health ("**SFDPH**"), the Planning Department, TNDC, and many members of the public.

The Board's denial of MSNA's appeal of the Permit came several months after the Board denied MSNA's appeal of the demolition permit for the Project. In that February appeal, MSNA also submitted extensive briefing and the Board heard extensive testimony regarding essentially the same set of facts and issues MSNA is raising again in its request for a rehearing. MSNA has had ample opportunity to make its arguments in opposition to the Permit. Likewise, the Board has had ample opportunity to consider and weigh the merits of MSNA's claims.

In its current effort to re-hash the same arguments, MSNA describes no extraordinary circumstances and raises no new or different facts or circumstances that if known at the time of the original hearing could have affected the outcome. As such, and to bring closure to a process that has already consumed vast amounts of resources from the above referenced public agencies and TNDC, and to comply with state law, this Board must reject MSNA's request for rehearing.

<u>MSNA Has Failed to Meet the Required Standard for Rehearing</u>

"Except in extraordinary cases, and to prevent manifest injustice, the Board may grant a Rehearing Request *only upon a showing that new or different material facts or circumstances have arisen*, where such facts or circumstances, if known at the time, could have affected the outcome of the original hearing." See Board Rules, Article V, Section 9. MSNA has failed to allege let alone demonstrate factual conditions that justify a rehearing. Instead, MSNA essentially argues that MSNA's representatives should be given more time to make the same arguments again because it believes the Board got it wrong (twice) and that has resulted in a manifest injustice. This is not and cannot be the standard for a rehearing. MSNA has been heard. As a matter of fairness and as a matter of law, TNDC is entitled to move on from this process.

One of MSNA's key arguments for rehearing is that the results of DTSC's third round of indoor air sampling were not available in time for them to develop arguments for the appeal. This argument lacks merit for several reasons. First, by MSNA's own admission, the "levels [of PCE vapors] have been relatively consistent" in each round of testing. In other words, nothing about the results of the latest round of indoor air sampling change the general parameters of this issue that was fully argued in MSNA's briefs and at the previous hearings.

Second, *in five out of the six homes tested*, DTSC concluded that the measured levels were "below action levels" and in the sixth home DTSC found levels slightly exceeding action levels, stating "This risk is at the low-end of the risk management range, slightly greater than the point of departure that defines di minimis risk." The latest results are not new or extraordinary, and actually indicate slightly lower levels than previous rounds of testing.

Finally, MSNA argues that it didn't have time to evaluate and address the results before the last hearing. In fact, while the results were only made public on August 15, 2023, MSNA must have had access to the results earlier than that because Mr. Siegel's Declaration dated July 27, 2023 (over two weeks before the hearing), used the results to calculate and discuss attenuation factors associated with the purported contamination. See Exhibit J to MSNA's July brief. So obviously MSNA *did* have the results in time to evaluate them. Nothing about the third round of indoor air sampling results can fairly be characterized as new, different, or extraordinary in any way.

MSNA also argues, incredibly, that it has not had the opportunity to fully make arguments in favor of a "soil vapor extraction" ("**SVE**") system for the Site. The appropriateness of an SVE system was the *primary topic of discussion* during the marathon hearing in August, and a central issue in the February hearing, as well. MSNA claims its expert, Mr. Grasmick, was not given adequate time to make his arguments fully understood. But Mr. Grasmick provided *nine pages* of testimony regarding his opinion about the implementation of an SVE system at the site in his written declaration attached as Exhibit H to MSNA's July brief, and provided additional oral testimony at the August hearing. In addition, DTSC directly addressed (and rejected) MSNA's request for SVE in the Responsiveness Summary for the Response Plan (which was included as an exhibit to TNDC's briefing), and addressed this issue with specificity in its August brief and testimony at the hearing. The notion that this issue has not been fully vetted borders on the absurd. MSNA offers no new facts or circumstances. Rather, MSNA simply feels the Board got it wrong and wants *another* do-over.

MSNA claims that because Don Moore was unable to attend the August hearing the Board should grant a rehearing so he can present findings related to a neighborhood scale PCE contamination soil vapor contour map. But this information was presented by Mr. Moore's extensive written testimony attached as Exhibit K to MSNA's July brief and discussed in detail in his January declaration and at the February hearing. Similarly, MSNA claims Mr. Moore's absence prevented him from making arguments regarding the claimed methodological shortcomings with DTSC's additional testing on the Project Site. Again, Mr. Moore's written testimony in July (Exhibit K) covered this issue, and *this was another of the main points of discussion* at the August hearing.

DTSC has committed itself to continuing the neighborhood scale PCE investigation and made it clear that issuance of the Permit is irrelevant to this ongoing effort. These arguments have been made and the issues heard. A rehearing on these issues is unwarranted.

<u>SB 35 Limits the Board's Authority to Grant the Rehearing Request</u>

Even if MSNA had met the standard required for the Board to grant a rehearing, the Board would be prohibited from granting that hearing due to the limitations placed on its authority by SB 35. As we pointed out in the original appeal, the statute requires "ministerial approval" of projects that qualify for streamlined treatment of SB 35. We do not wish to repeat here the full SB 35 argument we made in opposition to MSNA's appeal of the Permit, but we remind the Board of the following key points.

According to the regulatory guidelines for SB 35 ("**Guidelines**") adopted by the California Department of Housing and Community Development ("**HCD**"), a ministerial approval is one in which a public official exercises "little or no personal judgment" as to "the wisdom or manner of carrying out the project." HCD Guidelines at Section 102(n). In cases like this, where the Planning Department has determined (and no one challenged the determination) that the Project is eligible for SB 35, the statute provides that "[the local government] *shall approve* the development." Cal. Gov't Code § 65913.4(c)(1) (*emphasis added*).

The ministerial requirement applies not only to initial approvals, but also to subsequent permits, including demolition permit and building permits. SB 35 provides that "[a] local government *shall issue* a subsequent permit required for a development approved under [SB 35] if the application substantially complies with the development as it was approved pursuant to [local objective standards]." *Id.* §§ 65913.4(h)(2)(A) (*emphasis added*). Here, the Planning Department confirmed the building permit application substantially complied with the development as initially approved. On this basis, DBI properly issued the Permit. Under these circumstances the law is clear that the Board must reject MSNA's attempt to hold up the Permit.

HCD agrees with this view. It has twice weighed in to make the above points and to put the Board on notice that granting MSNA's appeal would run afoul of state law. A copy of HCD's letter to the Board dated February 22, 2022, [sic] is attached hereto as **Exhibit A.** A copy of HCD's letter the Board dated August 10, 2023, is attached hereto as **Exhibit B.** We urge the Board to respect the rule of law and reject MSNA's request for rehearing.

Conclusion

MSNA has failed to demonstrate the requisite facts that would justify a rehearing of the Permit appeal. This Board has carefully considered and debated MSNA's claims in two previous proceedings, and has twice arrived at the same conclusion. MSNA may strongly disagree with the Board's decisions, but that is not the standard. MSNA's appeals to date have significantly added to the cost of delivering the Project, and a rehearing would further burden the Project with unnecessary costs. Given the scarcity of available funding for affordable housing, this money would be better spent on housing for people who need it. TNDC respectfully requests that this Board reject MSNA's request so that it may commence the important work of building affordable housing on the Project Site.

Very truly yours,

Charles J. Higley

41265\16369025.1

EXHIBIT A

HCD Letter to Board dated February 22, 2022 [sic]

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY GAVIN NEWSOM, *Governor*

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453
www.hcd.ca.gov

February 22, 2022

San Francisco Board of Appeals
City and County of San Francisco
Via: boardofappeals@sfgov.org
49 S Van Ness Ave.
San Francisco, CA 94103

Dear San Francisco Board of Appeals:

RE: 2550 Irving Street – Letter of Support and Technical Assistance

The purpose of this letter is to provide technical assistance to the City and County of San Francisco (City/County) regarding the housing project located at 2550 Irving Street managed by Tenderloin Neighborhood Development Corporation (TNDC). This assistance is based in part upon Appeal No. 22-092 that was heard at the February 8, 2023, Board of Appeals meeting and continued to the February 22 meeting. Appeal No. 22-092 is an appeal of the demolition permit issued on November 18, 2022. Apparently, appellants believe that the project should be subject to additional review relating to hazardous substances.

The California Department of Housing and Community Development (HCD) is submitting this letter to aid with the interpretation of the Streamlined Ministerial Approval Process created by Senate Bill (SB) 35 (Chapter 366, Statutes of 2017) and codified in Government Code section 65913.4 in relation to the appeal of the demolition permit.

Project Approval under the Streamlined Ministerial Approval Process

The 90-unit affordable housing project was processed and approved under Government Code section 65913.4 (SB 35 streamlining). Section 65913.4, subdivision (a), states that a development proponent may submit an application for a development that is subject to the streamlined, ministerial approval process provided by subdivision (c) and is not subject to a conditional use permit (CUP) or any other non-legislative discretionary approval if the development satisfies all of the objective planning standards outlined in subdivision (a). San Francisco's approval of the SB 35 application establishes that the project does comply with all the objective standards set forth in subdivision (a).

The only one of these standards that is even potentially relevant to the project or this appeal is set forth in Government Code section 65913.4, subdivision (a)(6)(E), which states that a project located on a hazardous waste site that is listed pursuant to Government Code section 65962.5 or a hazardous waste site designated by the

Department of Toxic Substances Control (DTSC) pursuant to Health and Safety Code section 25356 does not qualify for streamlined ministerial review under SB 35 unless DTSC has cleared the site for residential use or residential mixed-uses. The project site at issue here is not located on any listed or designated hazardous waste site, so this exception to streamlined, ministerial approval does not apply.

Moreover, DTSC approved a Site Assessment Plan and Report of Findings on June 8, 2021, confirming that the project site had been adequately characterized under DTSC standards. The project site was not identified as a hazardous waste site pursuant to Government Code section 65962.5 or Health and Safety Code section 25356 and was not listed on the Hazardous Waste and Substances Sites List.

Hence, the project meets the requirements of Government Code section 65913.4, subdivision (a)(6)(E). Accordingly, pursuant to Government Code section 65913.4, subdivision (c)(1), the City/County acted correctly when it approved the project and when it granted the demolition permit in question. To derail the project now by overturning the grant of the demolition permit would fly in the face of SB 35.

“Subsequent Permits” after Streamlined Ministerial Approval Process

Government Code section 65913.4, subdivision (h)(2)(A), addresses the issue of demolition permits explicitly. It states, “A local government *shall issue* a subsequent permit required for a development under this section if the application substantially complies with the development as it was approved pursuant to subdivision (c).” (Emphasis added.)

The project at issue here was approved pursuant to subdivision (c) when it was originally approved under SB 35, and HCD understands that the application for the demolition permit complies completely with the development as it was approved at that time. Accordingly, subdivision (h)(2)(A) mandates issuance of the demolition permit “without unreasonable delay” and makes clear that review of the demolition “permit application shall not inhibit, chill, or preclude the development.” To do anything other than reject Appeal No. 22-092 would violate this statutory rule.

Limitations on Public Oversight of SB 35 Projects

Furthermore, Government Code section 65913.4, subdivision (d)(1), clearly limits the scope of review and public oversight on SB 35 projects. Under this subdivision, design review or public oversight shall be objective and be strictly focused on assessing compliance with criteria required for streamlined projects and shall not in any way inhibit, chill, or preclude ministerial approval.

Since there are no conflicts with subdivision (a), including subdivision (a)(6)(E) as discussed above, no further public oversight is permissible. Certainly, further review of a hazardous waste issue already reviewed by DTSC and covered by the City in its review of the SB 35 application is not appropriate. Analysis of criteria required for streamlined projects has already been completed through the SB 35 application process. An appeal of the demolition permit is incompatible with streamlined, ministerial approval and is not permitted under subdivision (d).[1]

Conclusion

The State of California is in a housing crisis, and the provision of housing is a priority of the highest order. HCD encourages the Board of Appeals to deny the appeal and uphold the approval of the Project's demolition permit. The Board of Appeals should remain mindful of the City/County's obligations under the Streamlined Ministerial Approval Process created by SB 35 and codified in Government Code section 65913.4.

HCD would also like to remind the City that HCD has enforcement authority over the implementation of Government Code section 65913.4, among other state housing laws. Accordingly, HCD may review local government actions and inactions to determine consistency with these laws. If HCD finds that a local government's actions do not comply with state law, HCD may notify the California Office of the Attorney General that the local government is in violation of state law (Gov. Code, § 65585, subd. (j)).

If you have any questions regarding the content of this letter or would like additional technical assistance, please contact Bentley Regehr at bentley.regehr@hcd.ca.gov.

Sincerely,

Shannan West
Housing Accountability Unit Chief

[1] HCD understands that the nearby site located at 2511 Irving Street is a hazardous waste site pursuant to Government Code section 65962.5 and has been placed on the Cortese List. However, this site does not affect the standing of 2550 Irving Street, which has undergone independent evaluation by the DTSC.

EXHIBIT B

HCD Letter to Board dated August 10, 2023

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY GAVIN NEWSOM, *Governor*

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT
2020 W. El Camino Avenue, Suite 500
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August 10, 2023

San Francisco Board of Appeals
City and County of San Francisco
Via: boardofappeals@sfgov.org
49 S Van Ness Ave.
San Francisco, CA 94103

Dear San Francisco Board of Appeals:

RE: 2550 Irving Street – Letter of Support and Technical Assistance

The purpose of this letter is to provide technical assistance to the City and County of San Francisco (City/County) regarding the housing project proposed at 2550 Irving Street (Project) by the Tenderloin Neighborhood Development Corporation (TNDC). This assistance is based partly upon Appeal No. 23-034 that is scheduled to be heard at the August 16, 2023, Board of Appeals meeting. Appeal No. 23-034 is an appeal of the site permit issued on June 26, 2023.

The California Department of Housing and Community Development (HCD) is submitting this letter to aid with the interpretation of the Streamlined Ministerial Approval Process created by Senate Bill (SB) 35 (Chapter 366, Statutes of 2017) and codified in Government Code section 65913.4 in relation to the appeal of the site permit. On February 22, 2023, HCD provided a Letter of Support and Technical Assistance regarding the appeal of the Project's demolition permit. Much of that letter's discussion is applicable to this appeal as well. It is HCD's understanding that the site and Project description have not changed and that no additional studies have been conducted since the February appeal hearing that would impact the Project's eligibility for streamlining.

Project Approval under the Streamlined Ministerial Approval Process

The 90-unit affordable housing Project was processed and approved under Government Code section 65913.4 (SB 35 streamlining). Section 65913.4, subdivision (a), states that a development proponent may submit an application for a development that is subject to the streamlined, ministerial approval process provided by subdivision (c) and is not subject to a conditional use permit (CUP) or any other non-legislative discretionary approval if the development satisfies all of the objective planning standards outlined in subdivision (a). As noted in HCD's previous technical assistance letter, San Francisco's approval of the SB 35 application establishes that the Project does comply with all the objective standards set forth in subdivision (a).

Of particular relevance is Government Code section 65913.4, subdivision (a)(6)(E), which states that a project located on a hazardous waste site that is listed pursuant to Government Code section 65962.5 or a hazardous waste site designated by the Department of Toxic Substances Control (DTSC) pursuant to Health and Safety Code section 25356 does not qualify for streamlined ministerial review under SB 35 unless DTSC has cleared the site for residential use or residential mixed-uses. It is HCD's understanding that the Project is not located on any listed or designated hazardous waste site, so this exception to streamlined, ministerial approval does not apply. Moreover, DTSC approved a Site Assessment Plan and Report of Findings on June 8, 2021, confirming that the Project site had been adequately analyzed under DTSC standards. The Project site was not identified as a hazardous waste site pursuant to Government Code section 65962.5 or Health and Safety Code section 25356 and was not listed on the Hazardous Waste and Substances Sites List. Thus, the Project meets the requirements for streamlined review under Government Code section 65913.4, subdivision (a)(6)(E).

Section 65913.4 goes on to state, in subdivision (c)(1), "If a local government determines that a development submitted pursuant to this section is consistent with the objective planning standards specified in subdivision (a) . . . it shall approve the development." Accordingly, the City/County acted correctly when it approved the Project under SB 35 and when it granted the site permit in question, and the Board of Appeals acted correctly when denying the appeal of the demolition permit in February. As with the appeal of the demolition permit, upholding the appeal of the site permit would be counter to the requirements of SB 35 streamlining.

Furthermore, Government Code section 65913.4, subdivision (h)(2)(A), requires that "[i]ssuance of subsequent permits shall implement the approved development, and review of the permit application shall not inhibit, chill, or preclude the development. For purposes of this paragraph, a subsequent permit means a permit required subsequent to receiving approval under subdivision (c), and includes, but is not limited to, demolition, grading, encroachment, and building permits and final maps, if necessary." A site permit meets this definition of subsequent permits, and therefore an appeal of the site permit would be considered an attempt to chill or preclude development.

Limitations on Public Oversight of SB 35 Projects

Additionally, Government Code section 65913.4, subdivision (d)(1), clearly limits the scope of review and public oversight on SB 35 projects. Under this subdivision, design review or public oversight shall be objective and be strictly focused on assessing compliance with criteria required for streamlined projects and, similar to subdivision (h)(2)(A), shall not in any way inhibit, chill, or preclude ministerial approval.

Since there are no conflicts with subdivision (a), including subdivision (a)(6)(E) as discussed above, no further public oversight is permissible. Undoubtedly, further review of a hazardous waste issue already reviewed by DTSC and covered by the City in its review of the SB 35 application is not appropriate. Analysis of criteria required for streamlined projects has already been completed through the SB 35 application process. An appeal of the demolition permit, site permit, or any other future permit covered under the project's SB 35 application is incompatible with streamlined, ministerial approval and is not permitted under subdivision (d).

Conclusion

The State of California is in a housing crisis, and the provision of housing is a priority of the highest order. HCD encourages the Board of Appeals to deny the appeal and uphold the approval of the Project's site permit. Granting this or any future appeal would be in violation of the Streamlined Ministerial Approval Process created by SB 35 and codified in Government Code section 65913.4.

HCD would also like to remind the City/County that HCD has enforcement authority over the implementation of Government Code section 65913.4, among other state housing laws. Accordingly, HCD may review local government actions and inactions to determine consistency with these laws. If HCD finds that a local government's actions do not comply with state law, HCD may notify the California Office of the Attorney General that the local government is in violation of state law (Gov. Code, § 65585, subd. (j)).

If you have any questions regarding the content of this letter or would like additional technical assistance, please contact Bentley Regehr at bentley.regehr@hcd.ca.gov.

Sincerely,

Shannan West
Housing Accountability Unit Chief

REHEARING REQUEST BRIEF SUBMITTED BY DTSC

Department of Toxic Substances Control

Meredith Williams, Ph.D.
Director
700 Heinz Avenue
Berkeley, California 94710-2721

Yana Garcia
Secretary for
·onmental Protection

Gavin Newsom
Governor

September 7, 2023

Board of Appeals
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APPEAL No. 23-034
MID-SUNSET NEIGHBORHOOD ASSOCIATION, INC., APPELLANT v.
DEPARTMENT OF BUILDING INSPECTION, RESPONDENT.
DTSC BRIEF OPPOSING MSNA's REHEARING REQUEST

As noted in Mid-Sunset Neighborhood Association's (MSNA's) Rehearing Request, "Except in extraordinary cases, and to prevent manifest injustice, the Board may grant a Rehearing Request only upon a showing that new or different material facts or circumstances have arisen, where such facts or circumstances, if known at the time of the original hearing, could have affected the outcome of the hearing." MSNA's claims are twofold: (1) that the board's disproportionate time questioning DTSC led to manifest injustice and (2) that new material facts have arisen that were not known at the time of the original hearing that could affect the outcome. DTSC disagrees with both assertions. DTSC believes that the hearing was conducted fairly and that the claims by MSNA are non-material and/or were known at the time of the hearing.

A. The Board's Hearing Did Not Result in "Manifest Injustice"

In its Brief in Support of its Rehearing Request, MSNA states that a rehearing is warranted to prevent manifest injustice. It bases its claims in part on an allegation that witnesses from Department of Toxic Substances Control (DTSC) were "allowed time to testify far exceeding the time allocated to MSNA's experts" and that, because of the "imbalance of time allocated," MSNA did not have the opportunity to prove up the grounds for its appeal. *Id.* at 2. DTSC disagrees with MSNA's characterization of the proceedings and believes the Board conducted the hearing fairly and without prejudice to MSNA.

The Board allocated seven minutes each to DTSC and MSNA to present their findings. Reviewing the recording of the proceedings, MSNA provides uninterrupted testimony from approximately 2:19:40 to 2:27:12, or for around 7 minutes and 32 seconds. DTSC's presentation beings at approximately 2:59:35 and ends at approximately 3:06:40, putting its duration at around 7 minutes and 6 seconds. MSNA's time was not reduced and if anything, MSNA presented for ever so slightly longer than DTSC.

Commissioners questioned both MSNA and DTSC representatives after their respective presentations. While the time allocated for presentations was roughly equal, it is true that DTSC's representatives spent longer at the podium answering questions from the Board. However, this difference in duration was due primarily to the commissioners' thorough, skeptical examination of the agency's evidence, not due to any unfair favoritism, and it was not the cause of any injustice.

Additionally, while the questions to MSNA were fairly narrow, relating to the contents of the appeal, the Board asked DTSC broader questions which included larger matters of agency policy, testing and remediation methods, and public participation approaches pertaining to Tetrachloroethylene (PCE) contamination throughout the neighborhood as a whole, not just as to 2550 Irving Street. DTSC representatives responded to Commissioners' questions to the best of their ability but did not seek to expand the extent of their testimony.

B. MSNA Is Not Offering New, Material Facts

In addition to claiming "manifest injustice," MSNA asserts that new material facts have come to light that could have affected the outcome of the hearing. To support this assertion, they point to one document entitled "Off-Site Residential Indoor Air and Soil Vapor Report – March 2022 and February 2023" ("Report"), an indoor air testing report for six residential properties to the north of 2550 Irving Street. However, DTSC disagrees that the Report contains facts that are either new or material to the issuance of the building permit. MSNA also asserts that it plans to offer new testimony regarding the necessity and efficacy of soil vapor extraction, as well as additional opinions from numerous individuals who the board has already heard from several times.

While the Report itself was only finalized shortly before the appeal hearing, the data contained Report was shared with MSNA well before that. DTSC completed and finalized the Report on Friday August 11th and met with residents on Monday August 14th prior to posting the report for the general public and meeting with MSNA representatives on Tuesday August 15th. However, in the attached email dated March 13, 2023, MSNA's environmental consultant, Don Moore confirms that he received and reviewed the indoor air and soil vapor results from both the March 2022 and February 2023 sampling events, showing that MSNA had all of the same data for at least five months before the hearing. **Exhibit A.** MSNA's Brief in Support of the Appeal, as well as the declarations of Joan Klau and Lenny Siegel refer to the testing results multiple times. *Id.* at 3; Klau Decl. ¶ 3; Siegel Decl. ¶¶ 5-7. Mr. Siegel's declaration, filed in conjunction with the appeal, includes an exhibit that compiles the results from all the indoor air testing in the residences to the north, including the two rounds covered in the Off-Site Residential Indoor Air and Soil Vapor Report (Exhibit 2 to Siegel Declaration). The Report and the results were discussed by MSNA and community members during the hearing, and DTSC received questions from commissioners regarding the results. See August 16, 2023 Board of Appeals hearing video for Item #6 at timestamps 4:28:06, 4:31:15, 4:31:16, 4:41:20, 4:44:49, and 4:54:04.

Given how extensively the off-site residential indoor air testing results were covered in the prior briefing and the August 16th hearing, the report and the data do not represent new facts or circumstances that could change the outcome of the hearing. Furthermore, the materiality of the report to the building permit appeal is questionable. Based on DTSC's thorough investigation and analysis, the subject property is not a source zone for PCE, and construction of the proposed building will not inhibit DTSC's ability to conduct further investigations and potential remediation of the source if and when it is located. The Report does not change that conclusion.

MSNA also states that it plans to offer additional testimony by Lenny Siegel, Don Moore, and Dan Grasmick, to support MSNA's argument that DTSC's testing was inadequate, that a soil vapor extraction system is necessary to protect onsite residents and neighbors, and that DTSC did not follow its guidance. However, all the same individuals submitted declarations for the August 16th hearing and/or testified in the hearing asserting the same. There is no indication the testimony being offered will convey new material facts as opposed to new variations on the analysis and opinions already presented.

As DTSC has stated throughout its testimony before the Board of Appeals and in various hearings and public meetings, DTSC is committed to ensuring the PCE contamination in the 2500 block of Irving and beyond is investigated and that all residents, including residents of the new development and surrounding neighbors, remain safe. The issuance of the building permit that is the subject of this appeal will not in any way impede DTSC in pursuing that commitment. Because the building will not prevent the investigation and remediation of PCE contamination in the neighborhood, because no new or different material facts have arisen since the August 16th hearing, and because MSNA's offered testimony appears to be duplicative of testimony already given (first to the board of supervisors, then to the board of appeals), DTSC opposes a rehearing.

Date: September 7, 2023

By:

Kathryn Kriozere (SBN 298513)
Senior Staff Counsel, Department of Toxic Substances Control

Exhibit A

Email from Don Moore, dated March 13, 2023

From: Don Moore <dmoore@cleanfinancials.com>
Sent: Monday, March 13, 2023 5:44 PM
To: Kowbel, Nelline@DTSC <Nelline.Kowbel@dtsc.ca.gov>; 'Paul Holzman' <pbholzman@gmail.com>; Smith, Whitney@DTSC <Whitney.Smith@dtsc.ca.gov>
Cc: Williams, Meredith@DTSC <Meredith.Williams@dtsc.ca.gov>; 'Lenny Siegel' <LSiegel@cpeo.org>; 'Flo Kimmerling' <geokimm@sbcglobal.net>; Sax, Todd@DTSC <Todd.Sax@dtsc.ca.gov>
Subject: RE: HNY! 2500 Block of Irving PCE Plume Follow Up

Nelline / Whit –

Your participation in the SF Board of Appeals (BOA) meeting was appreciated as it was good to hear a few fragments of answers to our questions below posed in early January; however, the key questions largely remain unaddressed. It was particularly good to hear that an ISE Order to the Police Credit Union (PCU) may be in the works which is long overdue after their abrupt exit after selling the property. We disagreed with a number of DTSC responses at the BOA meeting but were not provided an opportunity to rebut. We did all heard the BOA Commissioners ask DTSC to consider the Resolution unanimously approved by the SF Board of Supervisors (BOS) for a comprehensive cleanup of the 2500 block of Irving which remains the primary goal of the MSNA.

- Recent IA / SV Data – we have seen the recent IA and soil vapor data and residents continue to breathe PCE above the DTSC ESL. However, what is most evident by the data is that soil vapor levels are increasing – significantly at a number of locations – this is contrary to prior DTSC statements that the SV plume is stable / decreasing. The 15-foot samples at SVP-30B have increased 25-times from Sept 2020 to Feb 2023 and at SVP-28B they have increased 30-times with significant variability over this period. **The generally increasing / unstable SV levels are indicative of a nearby source area.**

- Miracle Cleaner Source Investigation – you can say whatever you want, but in my 30+ years of consulting, I have never seen a source investigation that does not sample at the actual location of where the dry cleaning operations were conducted – this is where the highest levels will be found. The soil matrix detection just outside the footprint of Miracle Cleaners clearly shows PCE was used in their operations – contrary to the assertions of TNDC's consultant. Consultants for both the PCU and TNDC misrepresented data in their conclusions about the source area and misled DTSC. **Miracle Cleaners did use PCE and a source investigation at that location remains a significant data gap.**

- SVE is the Appropriate Technology for a Neighborhood-Wide Cleanup – as reflected in the attached Response Plan Addendum, DTSC's own contractor, RMD Environmental, showed that SVE is the most technically- and cost-effective cleanup technology for this situation. SVE has been validated by experts at Apex, Stantec and Ramboll that is expected to result in a quick and effective cleanup. **DTSC failed to comment on the TNDC Response Plan that was inconsistent with two DTSC guidance documents which should have considered SVE and identified VIMS as a possible interim measure only after implementation of active remediation to the extent feasible.**

- Highest Level of Protection for Current Residents – during our September meeting, Meredith stated that this situation warranted the highest level of protection as reflected in the meeting notes. Lenny, myself and numerous colleagues – including RMD – are involved in and aware of numerous DTSC and Water Board projects that require remediation and / or mitigation for IA levels above the ESL. While the current focus is on the north side of Irving Street, the SV levels adjacent homes on the south side of Irving are twice as high as the north side – when will further step out sampling be conducted on the south side of Irving to fully delineate the attached PCE plume? Data suggests IA risk is higher in this area. **In this residential setting, with decades of exposure – certainly at higher historic levels, with preferential pathways and sensitive populations the highest level of protection within DTSC's authority should be applied.**

We look forward to DTSC's continued efforts to realize the BOS Resolution and DTSC's Mission Statement – protecting human health by cleaning up contaminated sites.

Planning Department's Response Brief to the Rehearing Request

49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
628.652.7600
www.sfplanning.org

BOARD OF APPEALS BRIEF

HEARING DATE: September 13, 2023

September 7, 2023

Appeal No.:	23-034
Project Address:	2550 Irving Street
Subject:	Interpretation and Application of State Laws
Staff Contact:	Corey Teague, Zoning Administrator – (628) 652-7328 corey.teague@sfgov.org

Introduction

This brief is intended to provide a concise response to the rehearing request filed following the appeal hearing on August 16, 2023. On September 13, 2023, the Board will consider the Mid-Sunset Neighborhood Association, Inc's Rehearing Request for the appeal of site permit no. 202205053630 for the project at 2550 Irving.

Project Approval under Streamlined Ministerial Approval Process

Section 9 of the Rules of the Board of Appeals states that Board may only grant a Rehearing Request only in extraordinary cases, and to prevent manifest injustice and "only upon showing that new or different material facts or circumstances have arisen" which could have affected the original outcome of the hearing. The Appellant's Brief in Support of the Rehearing Request presents no new or different material facts, nor does it show that new circumstances have arisen, that would warrant rehearing by the Board.

As noted in correspondence from the California Department of Housing and Community Development dated August 10, 2023, the project is not located on a hazardous waste site as defined in State Law, so the issues raised by the appellant in the Rehearing Request would not change the project's eligibility for streamlining under

CA Government Code Section 65913.4 ("SB 35"), which is the subject of the hearing. Furthermore, SB 35 states that issuance of subsequent permits, such as the site permit here, shall "implement the approved development, and review of the permit application shall not inhibit, chill or preclude the development." Granting the rehearing request when no new or different material facts or circumstances have been presented would have the effect of chilling or precluding the development, contrary to the intent of SB 35.

Conclusion

To conclude, the appellant has not provided information to demonstrate that there would be a different outcome from the appeal hearing on August 16, 2023, and granting a rehearing request would not be consistent with state law. The Planning Department urges the Board of Appeals to deny the Request for Rehearing.

cc: Kate Conner (Planning Department)
Carly Grob (Planning Department)

Enclosures: Exhibit A – Letter from the California Department of Housing and Community Development Dated August 10, 2023

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY GAVIN NEWSOM, *Governor*

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453
www.hcd.ca.gov

August 10, 2023

San Francisco Board of Appeals
City and County of San Francisco
Via: boardofappeals@sfgov.org
49 S Van Ness Ave.
San Francisco, CA 94103

Dear San Francisco Board of Appeals:

RE: 2550 Irving Street – Letter of Support and Technical Assistance

The purpose of this letter is to provide technical assistance to the City and County of San Francisco (City/County) regarding the housing project proposed at 2550 Irving Street (Project) by the Tenderloin Neighborhood Development Corporation (TNDC). This assistance is based partly upon Appeal No. 23-034 that is scheduled to be heard at the August 16, 2023, Board of Appeals meeting. Appeal No. 23-034 is an appeal of the site permit issued on June 26, 2023.

The California Department of Housing and Community Development (HCD) is submitting this letter to aid with the interpretation of the Streamlined Ministerial Approval Process created by Senate Bill (SB) 35 (Chapter 366, Statutes of 2017) and codified in Government Code section 65913.4 in relation to the appeal of the site permit. On February 22, 2023, HCD provided a Letter of Support and Technical Assistance regarding the appeal of the Project's demolition permit. Much of that letter's discussion is applicable to this appeal as well. It is HCD's understanding that the site and Project description have not changed and that no additional studies have been conducted since the February appeal hearing that would impact the Project's eligibility for streamlining.

Project Approval under the Streamlined Ministerial Approval Process

The 90-unit affordable housing Project was processed and approved under Government Code section 65913.4 (SB 35 streamlining). Section 65913.4, subdivision (a), states that a development proponent may submit an application for a development that is subject to the streamlined, ministerial approval process provided by subdivision (c) and is not subject to a conditional use permit (CUP) or any other non-legislative discretionary approval if the development satisfies all of the objective planning standards outlined in subdivision (a). As noted in HCD's previous technical assistance letter, San Francisco's approval of the SB 35 application establishes that the Project does comply with all the objective standards set forth in subdivision (a).

Of particular relevance is Government Code section 65913.4, subdivision (a)(6)(E), which states that a project located on a hazardous waste site that is listed pursuant to Government Code section 65962.5 or a hazardous waste site designated by the Department of Toxic Substances Control (DTSC) pursuant to Health and Safety Code section 25356 does not qualify for streamlined ministerial review under SB 35 unless DTSC has cleared the site for residential use or residential mixed-uses. It is HCD's understanding that the Project is not located on any listed or designated hazardous waste site, so this exception to streamlined, ministerial approval does not apply. Moreover, DTSC approved a Site Assessment Plan and Report of Findings on June 8, 2021, confirming that the Project site had been adequately analyzed under DTSC standards. The Project site was not identified as a hazardous waste site pursuant to Government Code section 65962.5 or Health and Safety Code section 25356 and was not listed on the Hazardous Waste and Substances Sites List. Thus, the Project meets the requirements for streamlined review under Government Code section 65913.4, subdivision (a)(6)(E).

Section 65913.4 goes on to state, in subdivision (c)(1), "If a local government determines that a development submitted pursuant to this section is consistent with the objective planning standards specified in subdivision (a) . . . it shall approve the development." Accordingly, the City/County acted correctly when it approved the Project under SB 35 and when it granted the site permit in question, and the Board of Appeals acted correctly when denying the appeal of the demolition permit in February. As with the appeal of the demolition permit, upholding the appeal of the site permit would be counter to the requirements of SB 35 streamlining.

Furthermore, Government Code section 65913.4, subdivision (h)(2)(A), requires that "[i]ssuance of subsequent permits shall implement the approved development, and review of the permit application shall not inhibit, chill, or preclude the development. For purposes of this paragraph, a subsequent permit means a permit required subsequent to receiving approval under subdivision (c), and includes, but is not limited to, demolition, grading, encroachment, and building permits and final maps, if necessary." A site permit meets this definition of subsequent permits, and therefore an appeal of the site permit would be considered an attempt to chill or preclude development.

Limitations on Public Oversight of SB 35 Projects

Additionally, Government Code section 65913.4, subdivision (d)(1), clearly limits the scope of review and public oversight on SB 35 projects. Under this subdivision, design review or public oversight shall be objective and be strictly focused on assessing compliance with criteria required for streamlined projects and, similar to subdivision (h)(2)(A), shall not in any way inhibit, chill, or preclude ministerial approval.

Since there are no conflicts with subdivision (a), including subdivision (a)(6)(E) as discussed above, no further public oversight is permissible. Undoubtedly, further review of a hazardous waste issue already reviewed by DTSC and covered by the City in its review of the SB 35 application is not appropriate. Analysis of criteria required for streamlined projects has already been completed through the SB 35 application process. An appeal of the demolition permit, site permit, or any other future permit covered under the project's SB 35 application is incompatible with streamlined, ministerial approval and is not permitted under subdivision (d).

Conclusion

The State of California is in a housing crisis, and the provision of housing is a priority of the highest order. HCD encourages the Board of Appeals to deny the appeal and uphold the approval of the Project's site permit. Granting this or any future appeal would be in violation of the Streamlined Ministerial Approval Process created by SB 35 and codified in Government Code section 65913.4.

HCD would also like to remind the City/County that HCD has enforcement authority over the implementation of Government Code section 65913.4, among other state housing laws. Accordingly, HCD may review local government actions and inactions to determine consistency with these laws. If HCD finds that a local government's actions do not comply with state law, HCD may notify the California Office of the Attorney General that the local government is in violation of state law (Gov. Code, § 65585, subd. (j)).

If you have any questions regarding the content of this letter or would like additional technical assistance, please contact Bentley Regehr at bentley.regehr@hcd.ca.gov.

Sincerely,

Shannan West
Housing Accountability Unit Chief

DPH’s Response Brief to the Rehearing Request

San Francisco Department of Public Health's Brief in Opposition to the Rehearing Request of Appeal No. 23-034

The San Francisco Department of Public Health, Environmental Health Branch, Contaminated Site Assessment and Mitigation (Maher) Program is tasked with ensuring the proper implementation of San Francisco Health Code (SFHC) Article 22A (the "Maher Ordinance"). The Maher Ordinance grants the authority to oversee the investigation, analysis, and (when deemed necessary) remediation or mitigation of hazardous substances in the subsurface within specified areas of the City and County of San Francisco. This brief is being submitted by the Department of Public Health (DPH) to the Board of Appeals (BOA) as a representative of the Department of Building Inspection (DBI) due to the specific health-related issues raised within the Appeal.

STATEMENT OF FACTS

- A Maher program application submitted on May 17, 2021 and Applicant received a Maher program case number (SMED 2043).
- The Maher program reviewed the September 2021 Response Plan and November 2021 Site Management Plan and issued a Site Management Plan Approval letter on February 2, 2022. The letter stated that the Maher program "defers environmental cleanup authority to the DTSC, a state agency, and will review all submitted items that are specifically applicable to SFHC Article 22A." The letter requires the submission of a Final Report and Certification following completion of development activities, in compliance with SFHC Article 22A.11.
- On August 22, 2022, the DPH reviewed and approved the Health Station on Site Permit No. 202205053630 associated with the proposed development.

DISCUSSION & CONCLUSIONS

No new or different material facts or circumstances have arisen.

- Since the hearing of Appeal No. 23-034, which was decided on August 16, 2023, no new or different material facts or circumstances have arisen that have changed the original determination of both DPH and DBI that the Applicant has met all applicable Site Permit requirements.
- DPH understands that there are two voluntary cleanup cases under the oversight of the California Department of Toxic Substances Control (DTSC), a state agency, at the property. One case (Envirostor No. 60003063) is associated with the current owner (TNDC) and involves installation of a vapor intrusion mitigation system through implementation of the approved Response Plan. The other case (Envirostor No. 60003000) is associated with the previous owner (TPCU) and has recently involved collection of off-site residential indoor air and soil vapor samples.
    - Based on our review of the information, the new sampling data does not change DPH's original determination that all data continue to indicate (1) conformance with Maher program requirements and (2) continued protection of on-site workers and the neighboring community.
    - It is DPH's understanding that investigations of tetrachloroethene (PCE) impacts to the subsurface in the area are on-going. These investigations will continue independently under the oversight of DTSC, separate from the construction of the proposed development at 2550 Irving.

Sincerely,

Ryan Casey, P.E. (CA)

Engineer

September 6, 2023

PUBLIC COMMENT

HD 8/16/23

FILE

Mejia, Xiomara (BOA)

From:	Roy Curry <roy@roycurry.com>
Sent:	Friday, August 11, 2023 2:59 PM
To:	BoardofAppeals (PAB)
Subject:	Appeal No. 23-034 at 2550 Irving street

BOARD OF APPEALS

AUG 11 2023

APPEAL #23-034

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Commissioners:

I am concerned and opposed to the above project until there is clarification of the toxins on the land of the project. I am also concerned and perplexed about the size of the building and its height and the effect it will have on the surrounding neighbors. It seems out of place a giant eyesore.

Roy Curry
PO Box 29568
San Francisco, Ca. 94129

HD 8/16/23

FILE

Mejia, Xiomara (BOA)

BOARD OF APPEALS

AUG 11 2023

APPEAL # 23-034

From:	Alemayehu Mergia <alekjud@gmail.com>
Sent:	Friday, August 11, 2023 10:35 AM
To:	BoardofAppeals (PAB)
Subject:	Appeal #24-034-2550 Irving Building Permit

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

RE: boardofappeals@sfgov.org Appeal #23-034 -2550 Irving Building Permit

Dear Commissioners of the Board of Appeals:

I am writing in support of denying the Building Permit Appeal # 23-034 and cause remediation to the 2550 site and neighboring area of PCE toxins, a cancer-causing carcinogen.

After reviewing the hearing of February on this same case, due to inadequacies of soils testing requested by the BOA orally last February, and agreed to by DTSC subsequently, time has been lost and it is necessary now to begin soil vapor extraction (soil vapor extraction) at 2550 Irving, a least expensive comprehensive solution, less expensive than anything TNDC (Tenderloin Neighborhood Development Corporation) was proposing. The SVE alternative will keep the project on schedule and have a lifetime efficacy and reliability, unlike TNDC's proposal.

It can be substantiated that SVE as an option, was completely avoided in TNDC's original study for unknown reasons. However, several independent experts claim SVE will remediate the problem of the PCE in the soil and air in all segments of the brownfield that up till now, have been demised into legal properties as separate projects and certain areas avoided by design to undermine the conclusions of independent experts. The independent Experts through collaboration and pooling of experience, now have adequate data that allows them to amend TNDC's Soil Management plan (SMP).

DTSC (Department of Toxic Substances Control) has argued their "sometimes theory" of needing to identify a "source" to clean up the PCE through a drawn-out iterative process. But now many professionals know this is not the case. Iterative processes takes longer. The source theory no longer becomes relevant when a pattern becomes so obvious according to several independent licensed professionals.

DTSC's methods have failed and have spiraled and atrophied into a ploy to cover up their mistakes of not characterizing the site as hazardous before signing a CLRRA agreement with TNDC. In fact, the south side of this City block is on the Cortese List causing a double Standard of development between low income people and market rate people. Developers for Market Rate housing now want the lower standard acquired to the North across the street to apply.

It is likely that SB35, being a relatively new law, was not coordinated with the original intent for CLRRA (voluntary) agreements: an "amnesty" program to get owners to encourage responsibility.

This bureaucratic detail further delayed the project by absolving TNDC of any responsibilities for the toxin, PCE, by compromising DTSC's core mission, to protect Public Health.

Limited to the foundation plane of TNDC's new proposed building at 2550 Irving, a passive VIM system was proposed. But this remedy normally is limited to existing buildings, not new buildings, and is recommended only as an interim solution by State policy. Further, DTSC's flawed response plan of September 2020 left the toxins in place with suggesting to adjacent neighbors to tape over their grade level shower drains.

Residents in many communities in California are being offered great cancer-risk protection. Why is this neighborhood not treated equally?

After the BOA Hearing in February, TNDC had a chance to look for the PCE source causing excessive air screening levels in homes to the North but choose again to design a plan that would not find it. Additionally, DTSC's theory stressed that you need to sample and prove "a source" to authorize a clean-up of PCE. But this too contradicts DTSC's own written guidance. The statement is arbitrary and not supported by practitioners or peers.

There is a preponderance of evidence right now to know the area should be remediated, not mitigated. It can be done now, without delaying the project. If TNDC continues to fight this, they will choose to delay their own project. The BOA can hardly be admonished for "chilling" by correcting this omission when DTSC's own iterative process has inherently "chilled" affordable housing production. Opposition public comment alleging that the BOA has no recourse under recent "chilling" legislation, may not be binding legislation yet. Please listen carefully to the appellant presenting team experts and allow them equal and adequate time to present and rebut.

Build the building, but we ask that TNDC "clean it up before you build it up".

Thank You,

Alemayehu Mergia

1498 24TH AVE

San Francisco, CA94122

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null

HD 8/16/23

FILE

Mejia, Xiomara (BOA)

BOARD OF APPEALS

AUG 1 4 2023

APPEAL #23-034

From:	Milo Trauss <milotrauss@gmail.com>
Sent:	Monday, August 14, 2023 1:44 PM
To:	BoardofAppeals (PAB)
Subject:	Reject Appeal to 2550 Irving, and Support new homes for families

Dear Board of Appeals,

Please reject the appeal and support bringing new homes to the Sunset.

This proposal is exactly what the city needs, 100% affordable housing.

Meanwhile, opponents' concerns are short sighted, narrow, and insignificant. In comparison to the fruition of new affordable homes, that are literally life changing and life saving, for generations, concerns over a few months of construction noise, a taller building in view, or new traffic patterns (as we collectively move away from car use), could not be more petty.

Thank you for your leadership in centering our city's greatest needs.
Milo Trauss
7 year SF resident and parent to a young child

Milo Trauss (he/him)
milotrauss@gmail.com
215-370-1225

HD 8/16/23

BOARD OF APPEALS

AUG 15 2023

APPEAL # 23-034

Mejia, Xiomara (BOA)

From: Isadore Rosenthal <isadore.rosenthal@gmail.com>
Sent: Tuesday, August 15, 2023 6:02 PM
To: BoardofAppeals (PAB)
Subject: Re: The Most Protective Remedy for Removal of PCE Removal at 2550 Irving Street Site

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Sorry my referenced as appeal should have included the statement: the removal of PCE soil vapor.

On Thu, Aug 10, 2023, 3:40 PM Isadore Rosenthal <isadore.rosenthal@gmail.com> wrote:

> 1) We urge The Appeal Board to support the soil vapor evaporation as the most protective remedy for the removal of toxic PCE in the soil under & surrounding the 2550 Irving Street Site. The problem is that PCE is in the soil and in the air at this site This site should have been characterized as hazardous as the site before the CLRRA agreement was signed with the TNDC. 2)We therefore question the permit because other processes were closed to our neighborhood organization, the MSNA. 3)In early 2021, TNDC and DTSC signed a CLRRA agreement that allowed the TNDC to not evaluate cleanup alternatives. 4)Because of SB35 and the fact that DTSC did not include the property on the Cortese List of hazardous materials, this project at 1550 Irving Street was not required to undergo an environmental review. Albright Cleaners site, at 2511 Irving Street, across the street from the 2550 Irving Street site, is on the Cortese List of hazardous materials. It is common knowledge that PCE soil vapor travels as a gas in the air and can last for a long time. This adds to the hazardous state of PCE at 2550 Irving Street. TNDC had an opportunity look for PCE on the 2550 site but disregarded a plan that would not find it. There is enough evidence right now to that the area should be cleaned up. A plan was designed not to look for PCE. This is hardly in keeping with the scientific method that DTSC purports to follow. 5)In September 2022, Mr. Meredith Williams, the Director of DTSC, promised "that DTSC will push for the most protective remedy" for the neighborhood. 6)I urge the Board of Appeals to require that the most protective remedy, i.e., soil vapor evaporation, be used at the 2550 Irving Street site as promised by Mr. Meredith Williams, The Director of the DTSC. Sincerely,
>
> Isadore Risenthal, 1434-25th Avenue, San Francisco, CA 94122

HD 8/16/23

FILE

Mejia, Xiomara (BOA)

From: Steve Leeds <cordello45@yahoo.com>
Sent: Wednesday, August 16, 2023 5:40 PM
To: BoardofAppeals (PAB)
Subject: Appeal # 023-34 - Reject it.

BOARD OF APPEALS
AUG 16 2023
APPEAL # 23-034

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the Board of Appeals

My name is Steve Leeds, a long time resident of the westside of SF, District 7.

The appeal of the site permit application by the Mid Sunset Neighborhood Association is another attempt to impede affordable housing development in the Sunset District. On August 4, 2020, the San Francisco Planning Department confirmed the eligibility of 2550 Irving Street for a ministerial approval process under SB -35

As a westside resident, I strongly believe that the mitigation measures proposed by Tenderloin Neighborhood Development Corporation will protect the health of the future residents at 2550 Irving. The Sunset District as a whole has a huge underinvestment in affordable housing. District 4 falls behind every other district in the City when it comes to building affordable housing.

I strongly urge you to deny this frivolous appeal and grant TNDC their site permit to build much needed housing at 2550 Irving.

Thank you,

Steve Leeds
D 7 Resident - Inner Sunset
SF 94122

HD 8/16/23

FILE

Mejia, Xiomara (BOA)

BOARD OF APPEALS

AUG 18 2023

APPEAL #23-034

From:	Michael Appel <info@email.actionnetwork.org>
Sent:	Friday, August 18, 2023 5:54 PM
To:	BoardofAppeals (PAB)
Subject:	Support 100% Affordable Homes at 2550 Irving Street in The Sunset!

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Members of the Board of Appeals,

San Francisco's housing shortage and affordability crisis is more acute than ever, which is why I am urging you to reject the appeal that jeopardizes a 100% affordable project at 2550 Irving Street.

Our city urgently needs more affordable housing on the Westside generally and in District 4 specifically. District 4, in fact, falls behind every other district when it comes to building affordable housing. As unbelievable as it sounds, District 4 has added only 17 new affordable homes over the last decade!

Opponents to this project have sued and appealed every step of the way, losing each time. This most recent appeal is yet another meritless attempt to block desperately needed affordable housing. With rising housing prices and the continued displacement of longstanding families, the 100% affordable homes at 2550 Irving Street will expand access and opportunities for working families and renters by creating safe and stable homes in a community with good access to schools, parks, and the Irving Street commercial district. They will also help address SF's staggering housing inequality, allow diverse families to remain in our Westside community, and support the urgent needs of our most vulnerable neighbors.

Again, I'm urging you to reject this attempt to block 100% affordable homes to 2550 Irving Street. Thank you.

Michael Appel
michaeltappel@gmail.com

San Francisco, California 94102

HD 8/16/23

FILE

Mejia, Xiomara (BOA)

From:	Connor Dearing <info@email.actionnetwork.org>
Sent:	Sunday, August 20, 2023 10:16 AM
To:	BoardofAppeals (PAB)
Subject:	Support 100% Affordable Homes at 2550 Irving Street in The Sunset!

BOARD OF APPEALS
AUG 2 0 2023
APPEAL # 23-034

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Members of the Board of Appeals,

San Francisco's housing shortage and affordability crisis is more acute than ever, which is why I am urging you to reject this frivolous appeal that jeopardizes a 100% affordable project at 2550 Irving Street.

Our city urgently needs more affordable housing on the Westside generally and in District 4 specifically. District 4, in fact, falls behind every other district when it comes to building affordable housing. As unbelievable as it sounds, District 4 has added only 17 new affordable homes over the last decade!

Opponents to this project have sued and appealed every step of the way, losing each time. This most recent appeal is yet another meritless and transparent attempt to block desperately needed affordable housing. With rising housing prices and the continued displacement of longstanding families, the 100% affordable homes at 2550 Irving Street will expand access and opportunities for working families and renters by creating safe and stable homes in a community with good access to schools, parks, and the Irving Street commercial district. They will also help address SF's staggering housing inequality, allow diverse families to remain in our Westside community, and support the urgent needs of our most vulnerable neighbors.

Again, I'm urging you to reject this attempt to block 100% affordable homes to 2550 Irving Street. Thank you.

Connor Dearing
connordearing@gmail.com

San Francisco, California 94114

From:	Kathleen Kelley
To:	BoardofAppeals (PAB)
Cc:	Kathleen Kelley
Subject:	Support for Re-hearing Appeal Number 23-034 for 2550 Irving Street
Date:	Thursday, September 7, 2023 11:34:02 AM

Dear President of the Board of Appeals and Board Commissioners,

I am writing in support of Appeal Number 23-034 for a Re-Hearing of this Appeal for reasons of manifest injustice.

Much information has been already sent to you to review and I appreciate greatly your patience and understanding during the hearings in February and August on this important (and what I believe may be a landmark appeal about public health) issue we are facing about the request for testing and clean-up of the known toxin PCE at the 2550 site and surrounding neighborhood slated for much needed real affordable housing in San Francisco.

There have been articles in the Mission Local and the SF Chronicle newspapers since the Aug 16th BOA Hearing and I will use those as a springboard for my comments as the articles draw out key points I feel deeply that I wish to make.

https://www.sfchronicle.com/bayarea/article/sunset-district-affordable-housing-18303126.php

https://missionlocal.org/2023/08/2550-irving-street-affordable-housing-soil-toxins-pce-board-of-appeals/

https://missionlocal.org/2023/08/affordable-housing-sunset-san-francisco-2550-irving-toxic/

- Why didn't DTSC do the same testing as across the street at 2511 Irving Street as asked by BOA and by us?

From the Eskenazi Aug 21st Mission Local article: the argument, paraphrasing DTSC, "*I didn't do what you wanted, I did something else. And it cost a lot more money — and you should be grateful"* is not a winner".

- DTSC did not do what the BOA asked and did not do what we asked. DTSC did other testing and spent more $ than necessary.
- DTSC was allotted much more time in the August hearing than the neighbors to respond, which I find to be manifest injustice.
- DTSC attended a meeting in bad faith with the neighbors the night before the hearing,

(without the DTSC Whit Smith) saying they had "no information". The following day at the hearing DTSC's Whit Smith showed up with many pages of documents to share with the BOA. DTSC has consistently avoided meaningful communication with neighbors. There is a timeline which proves this.

- From Eskenazi article dated Aug 21,2023: "Both the neighborhood association and the Board of Appeals thought an agreement was reached in February to undertake PCE testing in the footprint of a former Miracle Cleaners dry-cleaning business at 2550 Irving, with the testing method being identical to the tests already performed across the street at the site of a second dry-cleaner". But this did not happen: The Department of Toxic Substances Control in fact, did *different* sorts of testing analyzing different sorts of things, which cost more than five times as much money." Respectfully, I am surprised and concerned that the BOA did not support the Appeal on this basis. Why are we allowing the toxins to remain and continue to threaten public health?

- Supervisor Engardio asked questions (from Eskenazi article dated Aug 21st)
  Engardio: "You would think that the tests they did on two sites, on two different sides of the street, would be the same, so they'd have a true comparison," said Engardio. Toxic Substances Control "is claiming it did all the testing, and everything is fine. But it does not match up to what the neighborhood asked for, or what a layperson might see as apples to apples."
  Engardio stresses that "It's not my role to second-guess a state agency that's in charge of keeping people safe." But, if only to check off a box, "It is baffling to me they would not have done apples to apples tests just to take this argument off the table."

- There is a great deal of double talk, distraction and expert bombast going on with DTSC because they don't want to do the proper testing (same testing as across the street as appropriately requested by the BOA and the neighbors) because that would be admitting that DTSC had not properly handled the site toxicity to begin with. <u>DTSC behavior has been unconventional and inconsistent with their own guidelines. There is a timeline which proves this out.</u>

- From the Eskenazi article: Dan Grasmick, an engineer and environmental consultant speaking on behalf of the neighborhood association, went further. At last week's meeting, he called the state's tests "seriously flawed," and said its testing regimen "appears to have been designed to not identify a primary source."

Reference the Aug 19, 2023 Chronicle article:

- One of the Commissioners said "I see a very bright line between the contamination which needs to be remediated and the permit we are here to consider," … "I don't think the permit is material to the contamination issues."

This argument makes no sense. The Appeal and the Contamination are directly linked and we are talking about endangerment of life. To approve the Permit and Deny the Appeal is to do nothing and allow the contamination to NOT be remediated.
If the appeal is denied this is Manifest Injustice.

- One of the Commissioners said (paraphrasing) "this seems to be the wrong venue to hear this case".

This is the appropriate venue. The courts are not an option where DTSC has immunity.

- One of the Commissioners also said: "Neighbors should have been able to argue their case to the Planning Commission and the Board of Supervisors, not just the Board of Appeals. "I don't think we should be the body imbued with this power, but unfortunately our state Legislature has ripped away the other layers of review."

- The BOA is the only venue currently. To deny this appeal is to do nothing about the proven contamination in the neighborhood. This is Manifest Injustice.

- To deny this appeal is Manifest Injustice and to turn our back on Public Health. The exposure exists and has proven in these neighbors houses as testified by our experts.

- One of the BOA Commissioners that supported the appeal on Aug 16th said:
  Reporter Will Jarrett with Mission Local Aug 17, quote: "I'm ready to grant the appeal, based on an overreliance on, and misplaced deference to, DTSC," said the Commissioner, referring to the Department of Toxic Substance Control. He contended that the agency did not meet and communicate enough with residents, and said he was disappointed it did not complete the additional soil vapor tests the Mid-Sunset Neighborhood Association requested. "If we really believe in affordable housing, if we really believe in the public health of the people of San Francisco, and future people in San Francisco, then we have to do this right," he said.

In closing, Commissioners, I respectfully ask that you grant a re-hearing and support this appeal as this is the ONLY opportunity to ask for the proper testing and the SVE, to take care of this toxic site, address this public health issue properly, cost less and be a permanent solution, (than the DTSC proposal of VIM), not delay the project schedule and to move forward with this housing. The neighbors literally have NO other place to turn . Please take grant a re-hearing and please support this very fair appeal request for public health. We look to the BOA to provide an efficient, fair and expeditious public hearing and decision-making process before an impartial panel. You are the last step in the City’s review process.

Respectfully,
Kathleen Kelley, Sunset District Resident

From: Mary OConnor
To: BoardofAppeals (PAB)
Subject: 2550 Irving Street - Appeal for a re-hearing - FULL REMEDIATION FOR ALL RESIDENTS....
Date: Thursday, September 7, 2023 2:06:46 PM

1. **<u>Key Points</u>**
2.

- **Writing in support of the appellant for Manifest Injustice.**
- Made aware of PCE Contamination in 2021 two years after the PCU Building was evacuated temporarily and modified to address PCE vapor intrusion into that building
- I am Worried for health of myself, my son, and my neighbors:

- Reference the cancer cluster map indicating a clear correlation and pattern.
- Across the street from 2550 at 2511 Irving Street, the site will be fully remediated as it is on the Cortese list.
- On the 2550 Irving Street, North side of the street, DTSC is proposing a temporary VIM solution for the future residents of the 2550 Irving Street project and **has not explained why they are doing nothing to protect neighbors next to the project where our experts have demonstrated there are higher than acceptable PCE levels.**
- **There must be a full remediation for <u>all residents, future and present.</u> There is no reason why SVE (soil vapor extraction) can't be done. <u>It should be done</u>. It can be done <u>without slowing down the project</u>. Construction can still start in late spring. DTSC has no excuse.**
- **To deny the appeal is equal to doing <u>nothing</u>.**
- **Surrounding residents have lived with vapor intrusion into their homes over the course of 70 years. Exposure is the priority metric.**
- **To do nothing is Manifest Injustice**

2. **<u>Additional Key Points</u>**

- Why didn't DTSC do the same testing as across the street at 2511 Irving Street as asked by BOA and by us?

From the Eskenazi Aug 21st Mission Local article: the argument, paraphrasing DTSC performance,
"*I didn't do what you wanted, I did something else. And it cost a lot more money — and you should be grateful"* is not a winner".

- **DTSC did not do what the BOA asked in February and did not do what the neighbors asked. DTSC did other testing and spent more $ than necessary.**

DTSC was given at least an hour to present evidence (of not doing the testing that was asked of them in February); while the neighbor's attorney and expert witnesses were given a much shorter time slot .

- From Eskenazi article dated Aug 21,2023: **"Both the neighborhood association and the Board of Appeals thought an agreement was reached in February to undertake PCE testing in the footprint of a former Miraclee Cleaners dry-cleaning business at 2550 Irving, with the testing method being identical to the tests already performed across the street at the site of a second dry-cleaner". But this did not happen: The Department of Toxic Substances Control in fact, did *different* sorts of testing analyzing different sorts of things, which cost more than five times as much money."**

- Supervisor Engardio asked questions (from Eskenazi Aug 21 article)
  Engardio: "You would think that the tests they did on two sites, on two different sides of the street, would be the same, so they'd have a true comparison," said Engardio. Toxic Substances Control "is claiming it did all the testing, and everything is fine. But it does not match up to what the neighborhood asked for, or what a layperson might see as apples to apples."
  Engardio stresses that "It's not my role to second-guess a state agency that's in charge of keeping people safe." But, if only to check off a box, "It is baffling to me they would not have done apples to apples tests just to take this argument off the table."

- **There is a great deal of CYA going on with DTSC because they don't want to do the proper testing (same testing as across the street) because that would be admitting that DTSC had not properly handled the site toxicity to begin with. <u>DTSC behavior has been unconventional and inconsistent with their own guidelines.</u>**

- From the Eskenazi article: Dan Grasmick, an engineer and environmental consultant speaking on behalf of the neighborhood association, went further. At last week's meeting, he called the state's tests "seriously flawed," and said its testing regimen "appears to have been designed to not identify a primary source."

Reference the Aug 19, 2023 SF Chronicle JK Dineen article:

- One of the Commissioners said "I see a very bright line between the contamination which needs to be remediated and the permit we are here to consider," … "I don't think the permit is material to the contamination issues."

This argument makes no sense. **The Appeal and the Contamination are directly linked and we are talking about endangerment of life. To approve the Permit and Deny the Appeal is to do nothing and allow the contamination to NOT be remediated.**

This is Manifest Injustice.

- One of the Commissioners said (paraphrasing) "this seems to be the wrong venue to hear this case".

This is the appropriate venue. The courts are not an option where DTSC has immunity.

- **One of the Commissioners also said: "Neighbors should have been able to argue their case to the Planning Commission and the Board of Supervisors, not just the Board of Appeals. "I don't think we should be the body imbued with this power, but unfortunately our state Legislature has ripped away the other layers of review."**

- T**he BOA is the only venue currently. To deny this appeal is to do nothing about the proven contamination in the neighborhood.** This is Manifest Injustice.

- **To deny this appeal is Manifest Injustice and to turn our back on Public Health. This BOA venue IS our only change to have this case heard.**

- One of the BOA Commissioners that supported the appeal on Aug 16th said:

  Reporter Will Jarrett with Mission Local Aug 17, quoted another **Commissioner: "I'm ready to grant the appeal, based on an overreliance on, and misplaced deference to, DTSC," said the Commissioner, referring to the Department of Toxic Substance Control. He contended that the agency did not meet and communicate enough with residents, and said he was disappointed it did not complete the additional soil vapor tests the Mid-Sunset Neighborhood Association requested. "If we really believe in affordable housing, if we really believe in the public health of the people of San Francisco, and future people in San Francisco, then we have to do this right," he said.**

  Please support this appeal for a Re-Hearing.

Thank You,
Mary Ellen O'Connor
1462 - 26th Avenue

From:	JJ Hollingsworth
To:	BoardofAppeals (PAB)
Subject:	Appeal No. 23-034
Date:	Thursday, September 7, 2023 3:59:02 PM

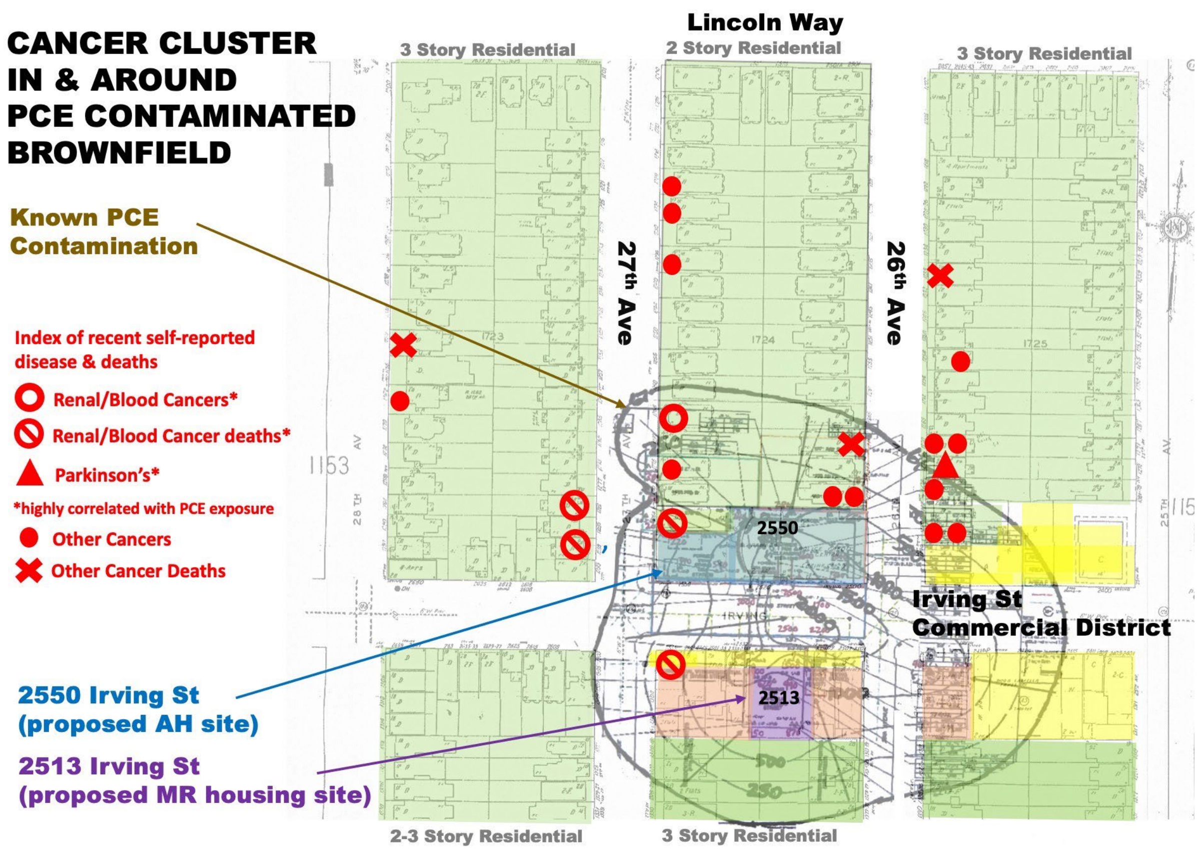
This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Appeals:

Re: Appeal No. 23-034

This appeal is strictly about PCE soil contamination engulfing the entire 2500 Irving Block. In our last BOA hearing on August 16, there was manifest injustice committed by rules of order that prevented the appellant from presenting its case in equal time. This is not about a disagreement with affordable housing. This injustice permits us to request a rehearing consistent within BOA regulations.

To stress what is at stake here, I am attaching the Cancer map which is a study we recently undertook in the neighborhood adjacent to the proposed project.



2550 Irving has not been remediated even though 2511 Irving directly across the street has been.

With this cancer cluster map indicating a clear correlation and pattern, do you really think you will not be held accountable and liable in the future?

Across the street from 2550 at 2511 Irving Street, the site will be fully remediated as it is on the Cortese list.

They are doing nothing to protect neighbors next to the project where our experts have demonstrated there are higher than acceptable PCE levels.

There must be a full remediation for <u>all residents, future and present.</u> There is no reason why SVE (soil vapor extraction) can't be done. <u>It should be done</u>. It can be done <u>without slowing down the project</u>. Construction can still start in late spring. DTSC has no excuse.

To deny the appeal is equal to doing <u>nothing</u>.

Surrounding residents have lived with vapor intrusion into their homes over the course of 70 years. Exposure is the priority metric.

To do nothing is Manifest Injustice.

Why didn't DTSC do the same testing as across the street at 2511 Irving Street as asked by BOA and by us?

From the Eskenazi Aug 21st Mission Local article: the argument, paraphrasing DTSC performance,

"*I didn't do what you wanted, I did something else. And it cost a lot more money — and you should be grateful"* is not a winner".

DTSC did not do what the BOA asked in February and did not do what the neighbors asked. DTSC did other testing and spent more $ than necessary.

DTSC was given at least an hour to present evidence (of not doing the testing that was asked of them in February); while the neighbor's attorney and expert witnesses were given a much shorter time slot.

It is well-known by the public that this process has been a gross injustice. Citations in the press and meeting minutes include:

- From Eskenazi article dated Aug 21,2023: "Both the neighborhood association and the Board of Appeals thought an agreement was reached in February to undertake PCE testing in the footprint of a former Miracle Cleaners dry-cleaning business at 2550 Irving, with the testing method being identical to the tests already performed across the street at the site of a second dry-cleaner". But this did not happen: The Department of Toxic Substances Control in fact, did *different* sorts of testing analyzing different sorts of things, which cost more than five times as much money."

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Engardio. Toxic Substances Control "is claiming it did all the testing, and everything is fine. But it does not match up to what the neighborhood asked for, or what a layperson might see as apples to apples."

Engardio stresses that "It's not my role to second-guess a state agency that's in charge of keeping people safe." But, if only to check off a box, "It is baffling to me they would not have done apples to apples tests just to take this argument off the table."

- There is a great deal of CYA going on with DTSC because they don't want to do the proper testing (same testing as across the street) because that would be admitting that DTSC had not properly handled the site toxicity to begin with. DTSC behavior has been unconventional and inconsistent with their own guidelines.

- From the Eskenazi article: Dan Grasmick, an engineer and environmental consultant speaking on behalf of the neighborhood association, went further. At last week's meeting, he called the state's tests "seriously flawed," and said its testing regimen "appears to have been designed to not identify a primary source."

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- One of the Commissioners said "I see a very bright line between the contamination which needs to be remediated and the permit we are here to consider," … "I don't think the permit is material to the contamination issues."

This argument makes no sense. The Appeal and the Contamination are directly linked and we are talking about endangerment of life. To approve the Permit and Deny the Appeal is to do nothing and allow the contamination to NOT be remediated.

This is Manifest Injustice.

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  Please support this appeal for a Re-Hearing.

  Thank You,

  JJ Hollingsworth

  1498 24th Avenue, SF CA 94122

From: Michael Nohr
To: BoardofAppeals (PAB)
Subject: Building permit appeal #23-034 for 2550 Irving Street Project
Date: Thursday, September 7, 2023 9:19:15 AM

Dear BOA,

I attended the meeting on August 16th regarding Building permit appeal #23-034 for 2550 Irving Street Project.

Please remediate the toxins in the area before you build.

If the cite was too toxic for the employees of the credit union then why would you invest over $100MM to build a 100 unit housing project until the area was cleared of toxins.

The last thing the city needs is to be sued for knowingly putting it's citizens in a toxic environment and then to have to tear down the building and do it right later on.

This makes no sense.

Yes, build housing, but do it properly.

Thank you!

From: Michael Weiss
To: BoardofAppeals (PAB); Rosenberg, Julie (BOA); Longaway, Alec (BOA)
Subject: Rehearing Request for Appeal No. 23-034
Date: Thursday, September 7, 2023 4:22:39 PM

Dear President Swig and Members of the Board of Appeals,

We have been talking to a number of our neighbors who live near the 2550 Irving St. site, and many of us have decided not to give written or oral testimony on the request for a re-hearing. The inordinate amount of time provided to opponents of site cleanup at the last hearing was a betrayal to both this neighborhood and the future residents of 2550 (who have no one to speak for them). You have the ability to correct this injustice. We look forward to the opportunity to contribute to a hearing where both sides of the debate will be given equal time to make their case.

Thank you for your consideration,

Michael Weiss
Joan Barken
John Barken
Rumesha Ahmed
Adam Michaels
Yi-Kuan Lee
Deborah Murphy
Denise Daley
Mira Kopell
Celeste Marty

From: Joan Klau
To: BoardofAppeals (PAB); Longaway, Alec (BOA)
Subject: Re: Public Comment for Rehearing Request for Appeal #23-034
Date: Thursday, September 7, 2023 4:29:54 PM

Resending to correct a typo.

---- On Thu, 07 Sep 2023 16:22:11 -0700 **Joan Klau <joan@klau.biz>** wrote ---

Dear President Swig and Members of the Board of Appeals,

I will keep my note short, because I genuinely hesitate to add to the burden of public comment before next week's hearing. But as the person who requested a meeting with DTSC a month prior to the August 16^{th} BOA hearing, and spoke with DTSC about their need to delay the meeting, I was shocked at how deeply unfair DTSC's presentation at the August 16^{th} BOA hearing was.

While DTSC did meet with MSNA at 4pm on August 15, it was a complete farce of a meeting – in which no one could or would answer any questions and the project supervisor who had all the data and answers was conspicuously absent, despite DTSC telling us a month earlier that this meeting had to be to postponed until August 15^{th} due to that key staffer's schedule. During the August 15 meeting, they simply took notes on all our unanswered questions, but they refused to make any commitment about when we might get the answers or a copy of the presentation made to the neighbors. So you can imagine our frustration when DTSC showed up the next day at the BOA to present 40 pages of documentation, data, and findings for over an hour. Those documents did not materialize overnight – they had that information on August 15^{th}, and they willfully withheld it so that we and our experts could not have time to review and respond to the new data, claims and assertions when they presented it for the first time to all of at the August 16^{th} BOA hearing.

You have the power to correct this injustice, and hold DTSC accountable to fair and reasonable inquiry. Please don't let them get away with withholding information. I hope you will seriously consider rehearing this appeal, giving both sides equal time to present their findings.

Thank you for your consideration,
Joan Klau
1273 27^{th} Ave
San Francisco, CA 94122

Longaway, Alec (BOA)

From: Eric Brooks <brookse32@sonic.net>
Sent: Thursday, September 7, 2023 4:30 PM
To: BoardofAppeals (PAB)
Subject: Strong Support of Appeal #23-034 - 2550 Irving Street

Hello Board of Appeals members,

As a lead full time environmental organizer since the mid 1980s, and on behalf of the San Francisco environmental and social justice group Our City SF, which has worked diligently over the last two decades to protect San Francisco and California residents and workers from impacts of legacy toxic wastes in and near their homes and workplaces, I strongly urge you to support Building Permit Appeal #23-034 for the 2550 Irving Street Project.

There is clear evidence that not enough has been done to make absolutely certain, the safety of current and future residents and workers in and near this project from legacy contamination on and near the site. The Precautionary Principle, which is an approved element of San Francisco law, clearly demands that the burden is on the project sponsors to prove the safety of their project before it is allowed to proceed.

The project sponsors have not been able to secure such assurances, therefore the project must not be allowed to move forward.

Thank you for your consideration of this very important issue to public health and safety.

Sincerely,

Eric Brooks, Coordinator
Our City SF
https://url.avanan.click/v2/___http://ourcitysf.org___.YXAzOnNmZHQyOmE6bzoyMWU1Nzk2MmM3ZWM1MGE3YzljZGQ0OTY0YmNkNmYwYjo2OjcwM2U6M2YyOTk1MzBiZjM5ZDQzNzNlZTI0OThiZThjNzJlOTM1NDQ2ZjNkOTk1YzY4MTdkODg0NDhmNzNhNGFkMDk5MTpwOlQ
415-756-8844

From:	Thomas Soper AIA
To:	BoardofAppeals (PAB)
Subject:	Appeal 23-034 Letter in support of the Appellant.
Date:	Thursday, September 7, 2023 4:37:58 PM

Project: 2550 Irving Street Housing project
Appeal no 23-034 -in support of the Appellant

Dear Commissioners.

The hearing on September 13 will determine, consistent with Board of Appeal regulations, if a rehearing will be granted. It is of the utmost importance that the unique circumstances of this case be put into perspective.
I am a licensed Architect and Master planner with over 40 years of National, International and State wide housing experience. I have worked tirelessly and closely with State, Local and Federal many times and have always been able to sort out good solutions which serve everyone's interests. There is something very unusual and awry with DTSC on this job to let it pass.

I am also an affordable housing advocate and know how to get these important projects delivered when laws are not contradictory. The Problem has gotten obfuscated but simply put the problem is three-fold. (1) the permit holder's CLRRA agreement unfairly gives away the public's right and future resident's rights to not live on contaminated cancer-causing land. (2) DTSC, the AHJ in charge of contaminated brownfields, in this case is attempting to back-peddled a solution for a contamination field under multiple properties which normally are the responsibility of independent private contractors. Regulatory agencies usually inspect and check plans but do not normally invent the solutions. I will expand on this in the coming paragraphs. (3)This is a matter of a public health imperative with life-threatening and/or debilitating consequences. There are cancer deaths already adjacent to the project site. (site plan handed out at August 16 hearing)

The Mission local paper, this past August 21, pin-pointed the weak link in solving this health imperative in one of the commissioner's conclusions: "I'm ready to grant the appeal, based on an overreliance on, and misplaced deference to, DTSC."

I will leave the definitions of what is safe to the Appellant's experts, but I cannot over rely on DTSC. DTSC's credibility has been seriously damaged. As noted in the same article above, when a commissioner asked DTSC if he said, "Did you work with the Appellant's experts to try to work out a plan to incorporate their testing and remedy suggestions"; as reported by the Mission Local article, DTSC basically said, "*I didn't do what you wanted, I did something else. And it cost a lot more money" — and you should be grateful".* This is not the acceptable behavior or attitude of any State Official with which I have ever worked.

The Appellant's team of contamination experts who have been marginalized consistently, are known to all of us licensed professionals as the go-to, the day-to-day experts, including not just PhD Toxicologists, but in the appellant's case, an MD/PhD Toxicologist on contamination. These professionals encounter contamination complexities and make them practical in all their variations. The appellant experts disagree profoundly with the DTSC's spokesman and his PhD toxicologist. In the August 16 hearing, the Appellant's Professional geologist who has worked with DTSC many times, called the State's tests "seriously flawed," and said its testing regimen "appears to have been designed to not identify a primary source."

But DTSC's testimony as noted in the SF Chronicle Article, dated August 19, 2023, shed light on DTSC's effectiveness to befuddle many. Their testimony was designed to be abstruse and at times to state purely hypothetical non-sense. As an unjust consequence, this has mislead some on this Board to say, "I see a very bright line between the contamination which needs to be remediated and the permit we are here to consider," … "I don't think the permit is material to the contamination issues." With all due respect, this argument makes no sense. The Appeal and the Contamination are directly linked. If it needs to be remediated, it needs to be remediated. The Board Of Appeals was conceived for this very instance: De novo purview particularly suits and uniquely empowers the Board for seeing a dispute especially if other agencies are not aware of intended consequences. Even City Attorneys, State Senators or Mayor says, "Our hands are tied". We need to pause and remember we are talking about endangerment of life. To approve the Permit and Deny the Appeal is to do nothing and allow the contamination to NOT be remediated.
With the greatest respect to all of your tireless and important checks and balances work for this City, I strongly urge you to grant a rehearing in this case and give the appellant's experts a fair chance to make clear to you how this project can be done for less money, without impeding the construction schedule. The neighborhood has been vilified long enough for the "chilling effect" and is caused by others.

Sincerely,

Thomas Soper
C18302

Thomas Soper AIA
Architect NCARB LEED AP
P 1.415.902.9457
F 1.415.566.0465

DOCUMENTS SUBMITTED FOR THE ORIGINAL HEARING DATED AUGUST 16, 2023

APPEAL NO. 23-034 FILE LINK: https://app.box.com/s/tk12qdky2om6phgebyj2like8sb05kju