

APPENDIX F

Phase II Subsurface Investigation Report

INTENTIONALLY LEFT BLANK

PHASE II SUBSURFACE INVESTIGATION REPORT

1605 Industrial Avenue
San Jose, California 95112

May 23, 2018
Partner Project Number: 18-211700.2

Prepared for:
LBA Realty LLC
3347 Michelson Drive, Suite 200
Irvine, California 92612



May 23, 2018

Mr. Eric Mendelson
LBA Realty LLC
3347 Michelson Drive, Suite 200
Irvine, California 92612

Subject: Phase II Subsurface Investigation Report
1605 Industrial Avenue
San Jose, California 95112
Partner Project Number: 18-211700.2

Dear Mr. Mendelson:

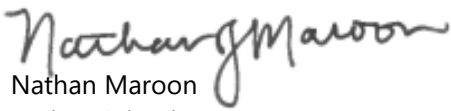
Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed on the above-referenced property. The following report describes the field activities, methods, and findings of the Phase II Subsurface Investigation conducted at the above-referenced property.

This assessment was performed utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact Debbie Stott at (310) 622-8855.

Sincerely,

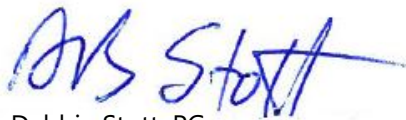
Partner Engineering and Science, Inc.



Nathan Maroon
Project Scientist



Joe Mangine, PG
Project Manager



Debbie Stott, PG
Principal

TABLE OF CONTENTS

1.0	Introduction	1
1.1	Purpose	1
1.2	Limitations	1
1.3	User Reliance	1
2.0	Site Background.....	2
2.1	Site Description.....	2
2.2	Site History	2
2.3	Geology and Hydrogeology	3
3.0	Field Activities	4
3.1	Preparatory Activities.....	4
3.1.1	Utility Clearance.....	4
3.1.2	Health and Safety Plan.....	4
3.2	Drilling Equipment.....	4
3.3	Boring Locations.....	4
3.4	Soil Gas Sampling	4
3.5	Post-Sampling Activities.....	5
4.0	Laboratory Analysis.....	6
4.1	Laboratory Analysis	6
4.2	Laboratory Analytical Results	6
4.2.1	Soil Gas Sample Analytical Results.....	6
5.0	Discussion and Conclusions	7
5.1	Regulatory Agency Guidance.....	7
5.2	Discussion	7
5.3	Summary and Conclusions.....	7

ATTACHMENTS

Tables	1. Summary of Investigation Scope 2. Soil Gas Sample VOCs Laboratory Results
Figures	1. Site Plan 2. Topographic Map 3. Sample Location Map
Appendices	A. Laboratory Analytical Report

1.0 INTRODUCTION

1.1 Purpose

The purpose of the investigation was to evaluate the potential impact of volatile organic compounds (VOCs) to soil gas as a consequence of a release or releases from historical on-site operations and the closed on-site Leaking Underground Storage Tank (LUST) case. LBA Realty LLC provided project authorization of Partner Proposal Number P18-211700.2.

1.2 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. However, it cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations are based on the observations, laboratory analyses, and the governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally-accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

1.3 User Reliance

Partner was engaged by LBA Realty LLC (the Addressee), or their authorized representative, to perform this investigation. The engagement agreement specifically states the scope and purpose of the investigation, as well as the contractual obligations and limitations of both parties. This report and the information therein, are for the exclusive use of the Addressee. This report has no other purpose and may not be relied upon, or used, by any other person or entity without the written consent of Partner. Third parties that obtain this report, or the information therein, shall have no rights of recourse or recovery against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, the Addressee and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of, and commitment to, these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report.

2.0 SITE BACKGROUND

2.1 Site Description

The subject property consists of two parcels of land comprising approximately 10.23 acres located on the north end of Industrial Avenue and the east side of Interstate Highway 880 within a mixed commercial and industrial area of Santa Clara County, California. The subject property is currently developed with six buildings plus a small office and is occupied by Specialty Truck Parts, which is a dismantler and re-seller of heavy duty truck parts. Specialty Truck Parts also sells used trucks, rebuilt transmissions, differentials, steering, and new parts.

The subject property is bound by commercial and industrial properties to the north, east, and south, and commercial properties to the west across Interstate Highway 880. Refer to Figure 1 for a site plan showing site features and surrounding properties.

2.2 Site History

Partner completed a *Phase I Environmental Site Assessment Report* (Phase I), dated May 23, 2018, prepared on behalf of LBA Realty LLC. According to the reviewed historical sources, the subject property was developed for agricultural use by 1939 and remained agricultural through at least 1950. By 1956, a major roadway was constructed adjacent to the west and a rectangular building was constructed in the southwest portion of the subject property. The 1963 and 1968 aerial photographs show the rectangular building in the southwest portion and numerous rows of stored materials in the central and northern portions of the subject property. A building east of the rectangular building appears to have been under construction or perhaps it was just an exterior storage area. By 1974, the entire property is developed with what appear to be the current buildings, is mostly paved, and used for exterior storage of materials and truck bodies. No significant changes in use were identified between 1974 and 2014. Based on the city directories, Specialty Truck Parts has occupied the subject property since 1963.

The subject property at 1605 Industrial Avenue is identified in the regulatory database as a former leaking underground storage tank (LUST) case. The LUST case was opened in November 1991 and closed on September 21, 2016. The former UST and a majority of the fuel-impacted soils were removed in 1991. Routine groundwater monitoring occurred from 1994 to July 2015. Subsurface investigations adequately defined the nature and extent of soil and groundwater impacts which included total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tert-butyl ether (MTBE). The lateral extent of the groundwater plume was restricted to the vicinity of the former UST. Excavation and dual-phase extraction were used to remediate subsurface impacts which were confined to the property boundaries. The responsible parties (Specialty Truck Parts Inc. and ACME Auto and Truck Parts Company) were offered low-threat case closure from the Santa Clara County Department of Environmental Health (SCDEH) via letter dated September 21, 2016. Low-threat case closure allows contaminants to remain in place assuming continued similar use of the property and adequate definition of the extent of contaminants. Residually-impacted soils remain at depths below 10 feet below ground surface (bgs). At the time of closure, the following conditions were present:

- o Groundwater = TPH-g up to 24,000 parts per billion (ppb), benzene up to 3,700 ppb, toluene up to 520 ppb, ethylbenzene up to 3,400 ppb, xylenes up to 6,500 ppb, and MTBE up to 9.6 ppb.

- o Soil = TPH-g up to 46 parts per million (ppm), benzene up to 0.27 ppm, toluene up to 0.028 ppm, ethylbenzene up to 1.3 ppm, and xylenes up to 0.78 ppm.
- o Vapor = Benzene at less than 3.8 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), ethylbenzene at less than 5.2 $\mu\text{g}/\text{m}^3$, and naphthalene at less than 25 $\mu\text{g}/\text{m}^3$.

The closure letter states that residual impacts to soil, groundwater, and vapor remain and could pose an unacceptable risk under certain site development activities such as grading, excavation, or installation of wells. The SCDEH must be notified prior to any changes in land use or planned activities that will disturb soil and/or groundwater and the notification must include a statement about residual impacts and how they will be mitigated during such activities. The concentrations of contaminants are expected to reduce with time. Additional unidentified contamination may require further investigation or cleanup.

Based on the presence of residual fuel-related contaminants in soil, vapor, and groundwater beneath the subject property, and the storage of automotive parts on the unpaved parcel, potential vapor intrusion concerns were identified during the Phase I.

2.3 Geology and Hydrogeology

Based on a review of the United States Geological Survey (USGS) *San Jose West* Quadrangle topographic map, the subject property is situated at an elevation approximately 120 feet above mean sea level, and the local topography is sloping to the southeast. Refer to Figure 2 for a topographic map of the site vicinity.

The subject property is situated within the Santa Clara Valley, which is an intermontane basin in the coastal region of the State of California. The rocks that underlie the basins and form the surrounding mountains are primarily marine sediments and metamorphic and igneous rocks, all of which are Mesozoic age but locally include rocks of the Cenozoic age. The estimated depth to bedrock at the subject property is approximately 1,200 to 1,300 feet below the ground surface.

Based on borings advanced during this investigation, the underlying subsurface consists predominantly of sand and sandy silt from the ground surface to approximately eight feet bgs.

Groundwater was encountered during previous investigations at depths ranging from 6 to 16 feet bgs.

3.0 FIELD ACTIVITIES

The scope of the Phase II Subsurface Investigation included the advancement of 12 borings (B1 through B12) for the collection of representative soil gas samples. Refer to Table 1 for a summary of the borings, sampling schedule and laboratory analyses for this investigation.

3.1 Preparatory Activities

Prior to the initiation of fieldwork, Partner completed the following activities.

3.1.1 Utility Clearance

Partner notified California Dig Alert 811 to clear public utility lines as required by law at least 48 hours prior to drilling activities. California Dig Alert 811 issued ticket number X812700439-00X for the project.

In addition, Partner subcontracted with Ground Penetrating Radar Systems, LLC (GPRS) on May 8, 2018, to clear boring locations of utilities. GPRS systematically free-traversed each proposed boring location with a Geonics EM-61 and a Fischer M-Scope electromagnetic induction (EM) equipment, a Schonstedt GA-52 magnetic gradiometer, a Sensors and Software Noggin ground penetrating radar (GPR) unit, and a Metrotech 9890 utility locator with line-tracing capabilities and the data was interpreted in real time for evidence of utility lines and/or other subsurface features of potential concern. Boring placement was modified as necessary based on the geophysical survey results to avoid damaging underground features.

3.1.2 Health and Safety Plan

Partner prepared a site-specific Health and Safety Plan, which was reviewed with on-site personnel involved in the project prior to the commencement of drilling activities.

3.2 Drilling Equipment

On May 8 and 9, 2018, Partner subcontracted with Environmental Control Associates (ECA) (State of California Water Well Drilling Contractor License Number 695970) to provide and operate drilling equipment. ECA, under the direction of Partner, advanced borings B1 through B12 with a truck-mounted GeoProbe 6600 direct-push rig. Sampling equipment was decontaminated between sample intervals and boring locations to prevent cross-contamination.

3.3 Boring Locations

Borings B1 through B12 were advanced evenly and representatively throughout the subject property area. Refer to Figure 3 for a map indicating boring locations.

3.4 Soil Gas Sampling

Soil Gas Probe Construction

Soil gas probes screened at two and eight feet bgs were constructed within each borehole. Boreholes were backfilled with dry, granular bentonite to approximately six inches below the desired sampling depth. A new section of 1/4-inch diameter polyethylene tubing with a new 1/4-inch diameter polypropylene filter at the terminal end was inserted into the borehole to the desired sampling depth. One-inch diameter PVC

casing was used as a guide for the tubing to ensure that the desired sampling depth was achieved. Sand was poured into the boring annulus to form an approximately one-foot long sand pack around the polypropylene filter, at which time the PVC piping was withdrawn. Approximately one foot of dry, granular bentonite was placed atop the sand pack and the remainder of the borehole was backfilled with hydrated bentonite to the ground surface to form a seal. The sampling end of the tubing was fitted with a valve and the probe was labeled for identification.

Soil Gas Sampling Methodology

Soil gas samples were collected in general accordance with the July 2015 Department of Toxic Substances Control (DTSC) and Los Angeles Regional Water Quality Control Board (LARWQCB) "Advisory – Active Soil Gas Investigations."

Soil gas samples were collected using one-liter, stainless-steel, cylindrical SUMMA canisters. The sampling containers were provided by ESN Lab Sciences. (ESN), a state-certified laboratory (California identification number 01157CA) in Mount Juliet, Tennessee, which subjected the canisters to a rigorous cleaning process using a combination of dilution, heat, and high vacuum. After cleaning, the canisters were batch certified to be free of target contaminants to a specified reporting limit via gas chromatography/mass spectroscopy prior to delivery.

Partner received the SUMMA canisters evacuated to approximately minus 30 inches of mercury. The SUMMA canisters were fitted with stainless-steel flow controllers, which ESN calibrated to maintain constant flow (approximately 0.1 liter per minute) for approximately five to 10 minutes of sampling time.

Each probe was allowed to equilibrate for a minimum of two hours after installation prior to sampling. After equilibration, the sample tubing and sampler screen were purged of ambient air using a separate one-liter SUMMA purge volume canister evacuated to approximately minus 30 inches of mercury. A tracer gas [1,1-difluoroethane (1,1-DFA)] was placed around each probe at the ground surface while sampling to detect ambient air intrusion. Once the one-liter purge volume canisters were filled, the sampling end of the tubing was fitted to the sampling canister and the port valve was opened, causing air to enter the sample container due to the pressure differential. Partner closed the valves after the canister was evacuated to approximately minus one to two inches of mercury, with pertinent data (e.g., time, canister vacuum) recorded at the start and end of sampling. The SUMMA canisters were labeled for identification and stored away from direct sunlight prior to analysis.

Soil gas samples were collected from each boring at two and eight feet bgs.

3.5 Post-Sampling Activities

Probes were removed from the subsurface and the boreholes were backfilled with hydrated bentonite chips following sampling activities. Boreholes advanced in improved areas were capped with concrete patch to match existing ground cover after being backfilled.

No significant amounts of derived wastes were generated during this investigation.

4.0 LABORATORY ANALYSIS

4.1 Laboratory Analysis

Partner collected 24 soil gas samples on May 8 and 9, 2018, which were transported at room temperature under chain-of-custody protocol to ESN for analysis on May 10, 2018. Each soil gas sample was analyzed for VOCs in accordance with EPA method TO-15.

4.2 Laboratory Analytical Results

Laboratory analytical results are included in Appendix A and discussed below.

4.2.1 Soil Gas Sample Analytical Results

Various VOCs were detected in each of the analyzed soil gas samples at concentrations above laboratory reported detection limits (RDLs).

Refer to Table 2 for a summary of the soil gas sample VOCs laboratory analysis results.

5.0 DISCUSSION AND CONCLUSIONS

5.1 Regulatory Agency Guidance

February 2016 Environmental Screening Levels

The San Francisco Bay Regional Water Quality Control Board (SFRWQCB) has established Environmental Screening Levels (ESLs) as an initial screening level evaluation. ESLs aid in assessing the potential threats to human health, terrestrial/aquatic habitats, and/or drinking water resources due to contaminants in soil, soil gas, and/or groundwater. Under most circumstances, the presence of impacts below applicable ESLs can be assumed to not pose a significant, chronic (i.e., long-term) adverse risk to the applicable receptor of concern. Conversely, sites that exceed ESLs generally require further evaluation and/or remediation. Please note that the ESLs were developed using default assumptions (e.g., standard exposure factors) and, consequently, are only meant for screening level assessments. The ESLs should not be considered enforceable regulatory standards. Cleanup levels are ultimately dependent on site-specific factors and are established by the regulatory agencies on a case-by-case basis.

5.2 Discussion

No VOCs were detected in any of the analyzed soil gas samples at concentrations exceeding applicable commercial ESLs.

Based on these results, vapor intrusion at the subject property does not appear to be a concern at this time.

5.3 Summary and Conclusions

Partner conducted a Phase II Subsurface Investigation at the subject property to investigate the potential impact of VOCs to soil gas as a consequence of a release or releases from historical on-site operations and the closed on-site LUST case. The scope of the Phase II Subsurface Investigation included the advancement of 12 borings. Twenty-four soil gas samples were analyzed for VOCs.

Subsurface lithology encountered in the upper eight feet bgs consisted predominately of sand and sandy silt.

None of the analyzed soil gas samples contained detectable concentrations of VOCs in excess of applicable commercial ESLs.

Based on the Subsurface Investigation, there is evidence of residual concentrations of various VOCs in soil gas beneath the subject property. However, none of the detected VOC concentrations exceed commercial screening criteria, indicating that vapor intrusion at the subject property does not appear to be a concern.

Based on the current commercial designation for the subject property, Partner recommends no further investigation with respect to the historical on-site operations and the closed on-site LUST case at this time. However, Partner notes that in the event that future redevelopment is planned for a more sensitive use, additional investigation and/or mitigation may be warranted.

Partner understands that LBA intends to demolish the current structures and redevelop with commercial building or buildings.

TABLES

Table 1: Summary of Investigation Scope
1605 Industrial Avenue
San Jose, California 95112
Partner Project Number 18-211700.2
May 2018

Boring Identification	Location	Terminal Depth (feet bgs)	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
B1	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs
B2	Adjacent to Former UST	8	Soil Gas	2, 8	VOCs
B3	Adjacent to Former UST	8	Soil Gas	2, 8	VOCs
B4	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs
B5	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs
B6	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs
B7	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs
B8	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs
B9	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs
B10	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs
B11	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs
B12	Exterior; Evenly Distributed	8	Soil Gas	2, 8	VOCs

Notes:

*Depths in **bold** analyzed for volatile organic compounds (VOCs) in accordance with United States Environmental Protection Agency (EPA) Method TO-15.

bgs = below ground surface

UST = underground storage tank

Table 1: Soil Gas Sample VOCs Laboratory Results
1605 Industrial Avenue
San Jose, California 95112
Partner Project Number 18-211700.2
May 2018

EPA Method	VOCs via TO-15																							
Units	(µg/m³)																							
Sample Identification	Acetone	Benzene	Bromodi-chloro-methane	Bromoform	1,3-Butadiene	Carbon disulfide	Chloro-ethane	Chloro-form	Chloro-methane	2-Chloro-toluene	Cyclo-hexane	Dibromo-chloro-methane	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Ethanol	Ethylben-zene	4-Ethyl-toluene	Trichloro-fluoro-methane	Dichloro-difluoro-methane	Heptane	n-Hexane	Isopropyl-benzene	Methylene Chloride	2-Butanone (MEK)
B1-SG-2	35.8	< 1.28	< 2.68	< 12.4	< 8.85	< 1.24	< 1.06	< 1.85	1.86	< 2.06	1.75	< 3.40	< 1.59	< 1.59	59.5	< 1.73	< 1.96	< 2.25	2.55	< 1.64	1.72	< 1.97	1.52	< 7.37
B1-SG-8	25.6	< 1.28	< 2.68	< 12.4	< 8.85	2.33	< 1.06	< 1.85	1.15	< 2.06	2.53	< 3.40	< 1.59	< 1.59	558	1.77	< 1.96	< 2.25	1.98	2.40	2.28	< 1.97	3.35	< 7.37
B2-SG-2	86.4	17.4	< 2.68	< 12.4	29.1	18.5	13.2	< 1.85	4.41	< 2.06	40.1	< 3.40	2.51	< 1.59	31.9	20.5	11.9	< 2.25	< 1.98	59.5	53.8	< 1.97	6.48	22.1
B2-SG-8	42.6	< 1.28	< 2.68	< 12.4	< 8.85	7.63	< 1.06	< 1.85	1.17	< 2.06	5.29	< 3.40	< 1.59	2.76	964	3.62	< 1.96	< 2.25	3.90	6.47	3.35	< 1.97	6.36	12.1
B3-SG-2	20.5	3.07	< 2.68	< 12.4	< 8.85	< 1.24	< 1.06	< 1.85	< 0.826	< 2.06	2.69	< 3.40	< 1.59	< 1.59	34.0	4.36	3.26	< 2.25	< 1.98	1.40	3.29	< 1.97	< 1.39	< 7.37
B3-SG-8	55.5	3.42	< 2.68	< 12.4	< 8.85	< 1.24	< 1.06	< 1.85	2.82	< 2.06	2.33	< 3.40	< 1.59	< 1.59	24.3	4.28	3.61	< 2.25	< 1.98	5.37	3.82	< 1.97	2.08	10.5
B4-SG-2	52.6	14.4	< 2.68	< 12.4	12.3	4.46	< 1.06	< 1.85	< 0.826	< 2.06	57.1	< 3.40	< 1.59	< 1.59	21.9	42.2	11.3	2.91	< 1.98	83.2	139	< 1.97	< 1.39	8.70
B4-SG-8	27.6	10.1	< 2.68	< 12.4	< 8.85	4.63	< 1.06	< 1.85	1.05	< 2.06	49.1	< 3.40	< 1.59	< 1.59	8.54	44.0	2.35	< 2.25	< 1.98	157	248	< 1.97	< 1.39	< 7.37
B5-SG-2	94.0	5.41	6.05	< 12.4	< 8.85	5.44	< 1.06	36.2	< 0.826	< 2.06	14.5	5.36	< 1.59	< 1.59	27.2	31.3	8.16	< 2.25	< 1.98	23.6	15.2	< 1.97	< 1.39	14.0
B5-SG-8	47.5	4.39	< 2.68	< 12.4	< 8.85	3.74	< 1.06	< 1.85	0.826	< 2.06	11.4	< 3.40	< 1.59	< 1.59	22.1	24.6	3.32	< 2.25	< 1.98	14.0	13.5	< 1.97	6.50	11.2
B6-SG-2	79.2	9.37	< 2.68	< 12.4	10.8	6.38	< 1.06	19.3	1.13	3.07	13.8	< 3.40	< 1.59	< 1.59	21.0	1,140	64.5	< 2.25	< 1.98	15.9	8.85	44.6	6.16	18.6
B6-SG-8	39.5	1.64	< 2.68	< 12.4	< 8.85	1.41	< 1.06	< 1.85	0.826	< 2.06	3.86	< 3.40	< 1.59	< 1.59	14.3	1,270	44.4	< 2.25	< 1.98	7.21	2.63	102	5.81	9.03
B7-SG-2	37.9	2.48	3.07	< 12.4	< 8.85	< 1.24	< 1.06	22.7	< 0.826	< 2.06	3.41	< 3.40	< 1.59	< 1.59	9.36	11.6	7.22	< 2.25	< 1.98	4.35	1.55	< 1.97	6.05	8.81
B7-SG-8	44.8	4.50	< 2.68	< 12.4	< 8.85	1.63	< 1.06	< 1.85	< 0.826	< 2.06	6.68	< 3.40	4.96	< 1.59	9.72	23.8	< 1.96	< 2.25	< 1.98	7.27	5.62	< 1.97	< 1.39	12.2
B8-SG-2	37.4	< 1.28	< 2.68	< 12.4	< 8.85	1.27	< 1.06	4.54	1.20	< 2.06	2.43	< 3.40	< 1.59	< 1.59	14.5	< 1.73	< 1.96	< 2.25	< 1.98	2.80	8.53	< 1.97	4.22	7.95
B8-SG-8	40.0	4.96	< 2.68	< 12.4	< 8.85	2.11	< 1.06	< 1.85	< 0.826	< 2.06	25.7	< 3.40	< 1.59	< 1.59	25.0	3.15	< 1.96	< 2.25	< 1.98	87.2	135	< 1.97	19.9	< 7.37
B9-SG-2	46.4	< 1.28	24.6	39.7	< 8.85	< 1.24	< 1.06	9.93	0.953	< 2.06	< 1.38	51.5	< 1.59	< 1.59	27.1	< 1.73	< 1.96	< 2.25	< 1.98	< 1.64	1.43	< 1.97	< 1.39	< 7.37
B9-SG-8	1,040	< 1.28	< 2.68	< 12.4	< 8.85	2.31	< 1.06	< 1.85	< 0.826	< 2.06	3.99	< 3.40	< 1.59	< 1.59	48.4	< 1.73	< 1.96	< 2.25	< 1.98	< 1.64	1.64	< 1.97	< 1.39	25.3
B10-SG-2	143	34.4	8.49	13.2	< 8.85	36.7	< 1.06	3.97	2.31	2.44	11.4	16.7	< 1.59	< 1.59	18.9	31.3	48.5	< 2.25	< 1.98	9.97	13.1	< 1.97	3.41	30.5
B10-SG-8	45.9	1.90	< 2.68	< 12.4	< 8.85	4.78	< 1.06	< 1.85	< 0.826	< 2.06	1.92	< 3.40	< 1.59	< 1.59	18.5	< 1.73	< 1.96	< 2.25	< 1.98	< 1.64	2.36	< 1.97	16.5	< 7.37
B11-SG-2	11.8	< 1.28	< 2.68	< 12.4	< 8.85	< 1.24	< 1.06	< 1.85	0.975	< 2.06	< 1.38	< 3.40	< 1.59	< 1.59	6.47	9.11	< 1.96	< 2.25	< 1.98	< 1.64	3.70	< 1.97	1.53	< 7.37
B11-SG-8	60.1	6.42	< 2.68	< 12.4	10.6	2.09	< 1.06	< 1.85	< 0.826	< 2.06	36.3	< 3.40	< 1.59	< 1.59	5.59	176	7.57	< 2.25	< 1.98	63.3	114	7.56	< 1.39	11.9
B12-SG-2	24.4	< 1.28	5.93	< 12.4	< 8.85	< 1.24	< 1.06	3.07	< 0.826	< 2.06	< 1.38	11.6	< 1.59	< 1.59	11.1	2.85	< 1.96	< 2.25	< 1.98	< 1.64	1.90	< 1.97	3.13	< 7.37
B12-SG-8	18.1	1.41	< 2.68	< 12.4	< 8.85	< 1.24	< 1.06	< 1.85	< 0.826	< 2.06	< 1.38	< 3.40	< 1.59	< 1.59	6.43	< 1.73	< 1.96	< 2.25	< 1.98	< 1.64	1.85	< 1.97	2.35	< 7.37
Commercial/Industrial ESL	140,000,000	420	330	11,000	NA	NA	44,000,000	530	390,000	NA	NA	NA	35,000	350,000	NA	4,900	NA	NA	NA	NA	NA	NA	12,000	22,000,000

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

TCE = trichloroethylene

PCE = tetrachloroethylene

µg/m³= micrograms per cubic meter

ESL = Environmental Screening Level (San Francisco Bay Regional Water Quality Control Board - February 2016) for evaluation of potential vapor intrusion, human health risk, Table SG-1

< = not detected above indicated laboratory Reported Detection Limit (RDL)

ND = not detected above laboratory RDLs

Values in **bold** exceed laboratory RDLs

Table 1: Soil Gas Sample VOCs Laboratory Results
1605 Industrial Avenue
San Jose, California 95112
Partner Project Number 18-211700.2
May 2018

EPA Method	VOCs via TO-15																	
Units	(µg/m³)																	
Sample Identification	Methyl Methacrylate	Naphthalene	2-Propanol	Propene	Styrene	1,1,2,2-Tetrachloro-ethane	PCE	Tetrahydro-furan	Toluene	TCE	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	2,2,4-Trimethyl-pentane	m,p-Xylene	o-Xylene	Xylenes	1,1-Difluoroethane	Other VOCs
B1-SG-2	< 1.64	< 6.60	< 6.15	6.75	< 1.70	< 2.75	< 2.72	< 1.18	4.83	< 2.14	< 1.96	< 1.96	2.21	< 3.47	< 1.73	< 3.47	5.51	ND
B1-SG-8	< 1.64	< 6.60	14.7	10.6	< 1.70	< 2.75	< 2.72	< 1.18	134	4.51	< 1.96	< 1.96	< 1.87	4.68	1.79	6.47	21.0	ND
B2-SG-2	< 1.64	< 6.60	10.4	670	< 1.70	< 2.75	10.2	< 1.18	143	4.97	9.59	2.92	114	69.3	21.4	90.7	24.9	ND
B2-SG-8	< 1.64	< 6.60	40.6	13.4	4.44	< 2.75	< 2.72	< 1.18	366	< 2.14	< 1.96	< 1.96	< 1.87	9.08	3.68	12.76	22.7	ND
B3-SG-2	< 1.64	< 6.60	< 6.15	< 1.38	< 1.70	< 2.75	8.19	< 1.18	24.8	< 2.14	3.29	< 1.96	9.23	14.4	4.44	18.84	<1.08	ND
B3-SG-8	< 1.64	< 6.60	< 6.15	< 1.38	< 1.70	< 2.75	6.34	< 1.18	25.9	< 2.14	4.26	< 1.96	8.07	15.8	4.87	20.67	13.3	ND
B4-SG-2	< 1.64	< 6.60	< 6.15	461	1.74	< 2.75	2.98	< 1.18	97.7	< 2.14	9.54	3.17	93.9	137	42.4	179.4	1.20	ND
B4-SG-8	< 1.64	< 6.60	< 6.15	< 1.38	< 1.70	< 2.75	< 2.72	< 1.18	26.4	< 2.14	2.42	< 1.96	20.9	138	43.6	181.6	2.49	ND
B5-SG-2	< 1.64	< 6.60	< 6.15	130	2.19	< 2.75	16.0	< 1.18	172	< 2.14	8.52	3.30	31.2	116	40.2	156.2	2.31	ND
B5-SG-8	< 1.64	< 6.60	< 6.15	102	1.87	< 2.75	< 2.72	< 1.18	629	< 2.14	3.08	< 1.96	21.5	83.5	28.4	111.9	14.1	ND
B6-SG-2	< 1.64	< 6.60	12.5	200	36.8	< 2.75	< 2.72	< 1.18	126	< 2.14	64.6	24.4	18.4	4,120	1,540	5,660	2.55	ND
B6-SG-8	< 1.64	< 6.60	9.91	28.5	51.1	< 2.75	< 2.72	< 1.18	75.6	< 2.14	28.5	11.7	< 1.87	4,620	1,750	6,370	2.88	ND
B7-SG-2	< 1.64	< 6.60	< 6.15	2.42	< 1.70	< 2.75	165	3.54	29.7	< 2.14	7.54	2.76	4.48	44.3	13.7	58.0	1.31	ND
B7-SG-8	1.70	< 6.60	< 6.15	17.5	< 1.70	< 2.75	< 2.72	< 1.18	19.7	49.8	2.23	< 1.96	5.16	82.7	26.3	109.0	< 1.08	ND
B8-SG-2	< 1.64	< 6.60	13.4	< 1.38	< 1.70	< 2.75	< 2.72	2.41	5.02	< 2.14	2.34	< 1.96	< 1.87	4.83	< 1.73	4.83	13.7	ND
B8-SG-8	< 1.64	< 6.60	< 6.15	< 1.38	< 1.70	< 2.75	< 2.72	< 1.18	15.7	< 2.14	< 1.96	< 1.96	< 1.87	10.6	3.60	14.2	< 1.08	ND
B9-SG-2	< 1.64	< 6.60	< 6.15	< 1.38	< 1.70	< 2.75	< 2.72	< 1.18	3.18	< 2.14	< 1.96	< 1.96	< 1.87	< 3.47	< 1.73	< 3.47	16.1	ND
B9-SG-8	< 1.64	< 6.60	262	20.5	< 1.70	< 2.75	< 2.72	< 1.18	3.18	< 2.14	2.29	< 1.96	< 1.87	4.81	< 1.73	4.81	8.61	ND
B10-SG-2	< 1.64	14.7	10.3	95.2	2.61	4.39	< 2.72	< 1.18	157	< 2.14	65.0	17.7	< 1.87	123	50.2	173.2	15.4	ND
B10-SG-8	< 1.64	< 6.60	< 6.15	17.5	< 1.70	3.03	< 2.72	< 1.18	7.38	< 2.14	< 1.96	< 1.96	< 1.87	< 3.47	< 1.73	< 3.47	12.5	ND
B11-SG-2	< 1.64	< 6.60	6.75	13.9	< 1.70	< 2.75	4.16	< 1.18	2.69	< 2.14	< 1.96	< 1.96	< 1.87	36.2	14.0	50.2	5.59	ND
B11-SG-8	< 1.64	< 6.60	< 6.15	109	11.6	< 2.75	< 2.72	< 1.18	20.2	< 2.14	7.25	2.85	< 1.87	311	318	629	2.78	ND
B12-SG-2	< 1.64	< 6.60	< 6.15	5.59	< 1.70	< 2.75	< 2.72	< 1.18	7.19	< 2.14	< 1.96	< 1.96	< 1.87	10.8	3.46	14.26	66.7	ND
B12-SG-8	< 1.64	< 6.60	< 6.15	9.84	< 1.70	< 2.75	< 2.72	< 1.18	4.19	< 2.14	< 1.96	< 1.96	< 1.87	< 3.47	< 1.73	< 3.47	40.7	ND
Commercial/Industrial ESL	NA	360	NA	NA	3,900,000	210	2,100	NA	1,300,000	3,000	NA	NA	NA	NA	NA	440,000	NA	NA

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

TCE = trichloroethylene

PCE = tetrachloroethylene

µg/m³= micrograms per cubic meter

ESL = Environmental Screening Level (San Francisco Bay Regional Water Quality Control Board - February 2016) for evaluation of potential vapor intrusion, human health risk, Table SG-1

< = not detected above indicated laboratory Reported Detection Limit (RDL)

ND = not detected above laboratory RDLs

FIGURES

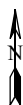
PARTNER



PARTNER

Engineering and Science, Inc.
1017 22nd Avenue, Suite 107
Oakland, California 94606

Project Number: 18-211700.2



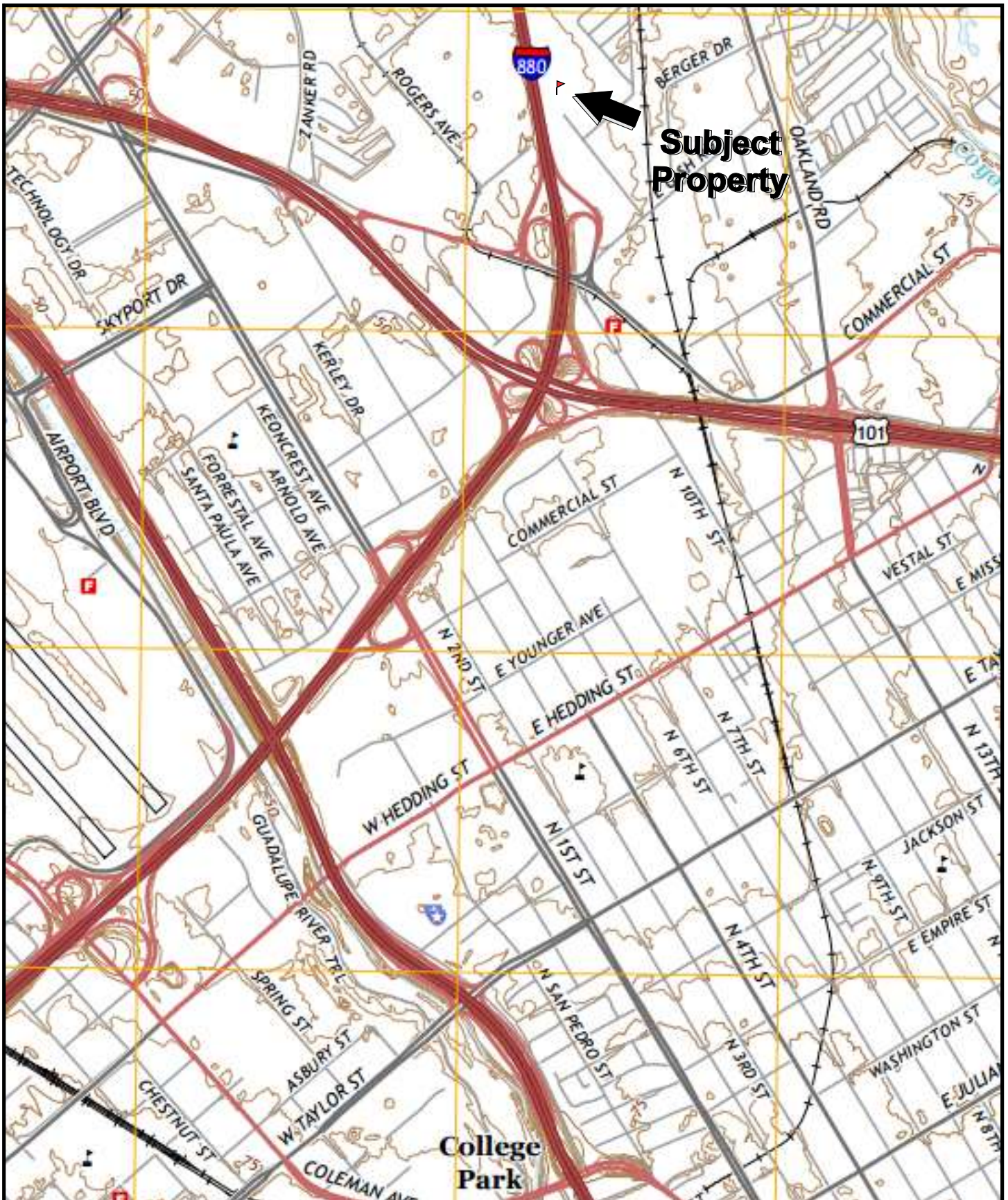
Subject Site

Legend



Site Plan

Figure	Prepared By	Date
1	N. Maroon	May 2018
1605 Industrial Avenue San Jose, California 95112		

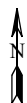


PARTNER

Engineering and Science, Inc.

1017 22nd Avenue, Suite 107
Oakland, CA 94606

Project Number: 18-211700.2

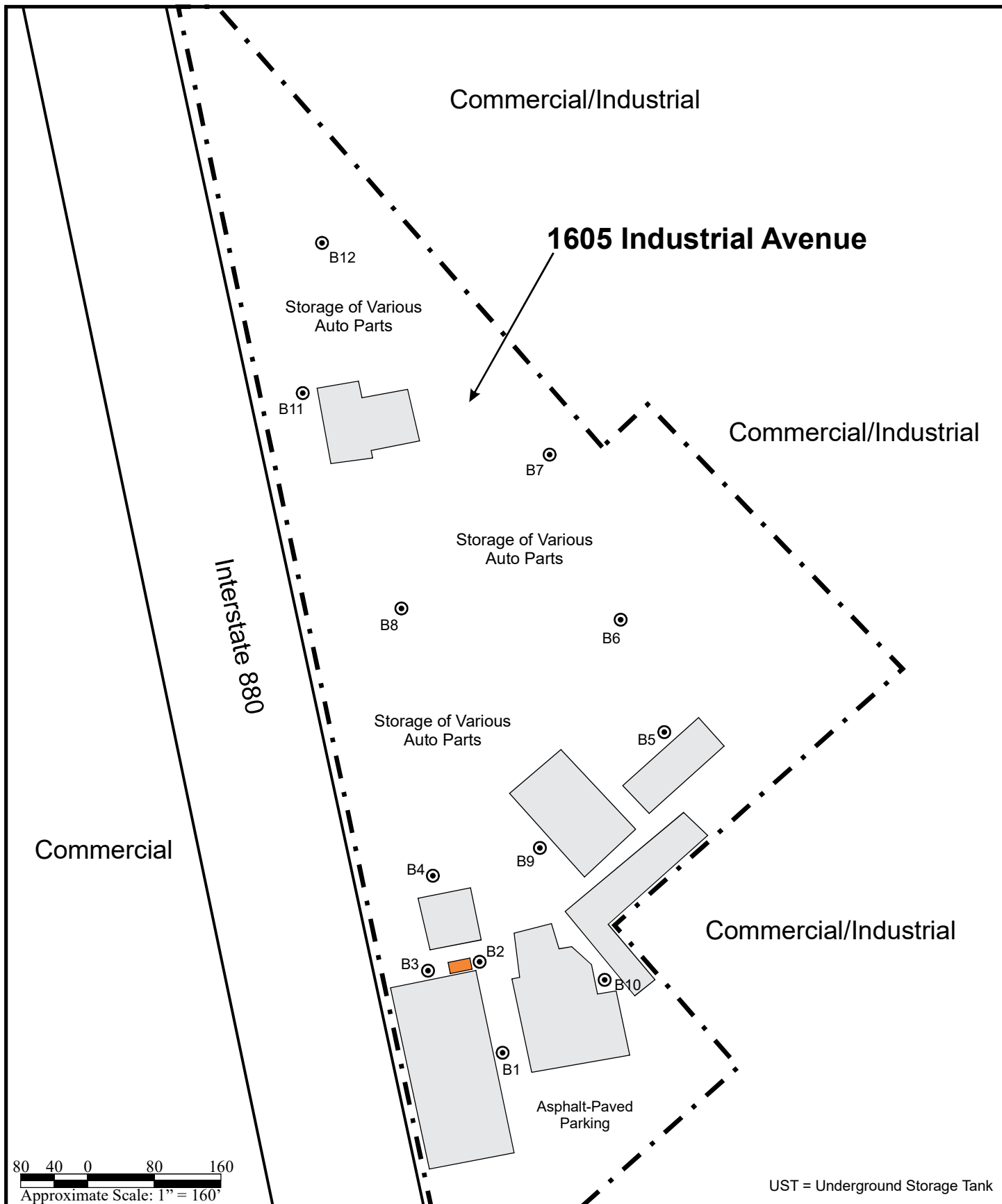


USGS San Jose West Quadrangle
Version: 2015 Current as of: 2015

Topographic Map

Figure	Prepared By	Date
2	N. Maroon	May 2018

1605 Industrial Avenue
San Jose, California 95112



PARTNER
Engineering and Science, Inc.
1017 22nd Avenue, Suite 107
Oakland, California 94606

Project Number: 18-211700.2

Legend

- Subject Site 
- Boring Location 
- Location of Former UST 

Sample Location Map

Figure	Prepared By	Date
3	N. Maroon	May 2018
1605 Industrial Avenue San Jose, California 95112		

APPENDIX A: LABORATORY ANALYTICAL REPORT

PARTNER

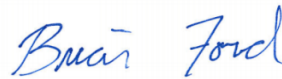
May 18, 2018

Partner Engineering & Science - CA

Sample Delivery Group: L993398
Samples Received: 05/11/2018
Project Number: 18-211700.2
Description: 1605 Industrial Avenue

Report To: Nate Maroon
2154 Torrance Boulevard
Ste 200
Torrance, CA 90501

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

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 ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	7
Sr: Sample Results	8
B1-SG-2 L993398-01	8
B1-SG-8 L993398-02	10
B2-SG-2 L993398-03	12
B2-SG-8 L993398-04	14
B3-SG-2 L993398-05	16
B3-SG-8 L993398-06	18
B4-SG-2 L993398-07	20
B4-SG-8 L993398-08	22
B5-SG-2 L993398-09	24
B5-SG-8 L993398-10	26
B6-SG-2 L993398-11	28
B6-SG-8 L993398-12	30
B7-SG-2 L993398-13	32
B7-SG-8 L993398-14	34
B8-SG-2 L993398-15	36
B8-SG-8 L993398-16	38
B9-SG-2 L993398-17	40
B9-SG-8 L993398-18	42
B10-SG-2 L993398-19	44
B10-SG-8 L993398-20	46
B11-SG-2 L993398-21	48
B11-SG-8 L993398-22	50
B12-SG-2 L993398-23	52
B12-SG-8 L993398-24	54
Qc: Quality Control Summary	56
Volatile Organic Compounds (MS) by Method TO-15	56
Gl: Glossary of Terms	72
Al: Accreditations & Locations	73
Sc: Sample Chain of Custody	74

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



B1-SG-2 L993398-01 Air

			Collected by N. Maroon	Collected date/time 05/08/18 08:30	Received date/time 05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110506	2	05/13/18 04:19	05/13/18 04:19	AMC

¹ Cp² Tc³ Ss

B1-SG-8 L993398-02 Air

			Collected by N. Maroon	Collected date/time 05/08/18 08:45	Received date/time 05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 10:30	05/13/18 10:30	AMC

⁴ Cn⁵ Sr

B2-SG-2 L993398-03 Air

			Collected by N. Maroon	Collected date/time 05/08/18 09:00	Received date/time 05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 11:15	05/13/18 11:15	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1111031	100	05/14/18 11:14	05/14/18 11:14	AMC

⁶ Qc⁷ Gl

B2-SG-8 L993398-04 Air

			Collected by N. Maroon	Collected date/time 05/08/18 09:15	Received date/time 05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 12:00	05/13/18 12:00	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1111031	25	05/14/18 11:55	05/14/18 11:55	AMC

⁸ Al⁹ Sc

B3-SG-2 L993398-05 Air

			Collected by N. Maroon	Collected date/time 05/08/18 09:30	Received date/time 05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 12:46	05/13/18 12:46	AMC

B3-SG-8 L993398-06 Air

			Collected by N. Maroon	Collected date/time 05/08/18 09:45	Received date/time 05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 13:32	05/13/18 13:32	AMC

B4-SG-2 L993398-07 Air

			Collected by N. Maroon	Collected date/time 05/08/18 10:00	Received date/time 05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 14:17	05/13/18 14:17	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1111031	25	05/14/18 12:37	05/14/18 12:37	AMC

B4-SG-8 L993398-08 Air

			Collected by N. Maroon	Collected date/time 05/08/18 10:30	Received date/time 05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 15:04	05/13/18 15:04	AMC



B5-SG-2 L993398-09 Air

			Collected by	Collected date/time	Received date/time
			N. Maroon	05/08/18 10:45	05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 15:50	05/13/18 15:50	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1111031	25	05/14/18 13:19	05/14/18 13:19	AMC

¹ Cp² Tc³ Ss

B5-SG-8 L993398-10 Air

			Collected by	Collected date/time	Received date/time
			N. Maroon	05/08/18 11:30	05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 16:34	05/13/18 16:34	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1111031	25	05/14/18 14:01	05/14/18 14:01	AMC

⁴ Cn⁵ Sr⁶ Qc

B6-SG-2 L993398-11 Air

			Collected by	Collected date/time	Received date/time
			N. Maroon	05/08/18 12:00	05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 17:19	05/13/18 17:19	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1111407	25	05/15/18 12:57	05/15/18 12:57	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1111951	25	05/16/18 16:17	05/16/18 16:17	AMC

⁷ Gl⁸ Al⁹ Sc

B6-SG-8 L993398-12 Air

			Collected by	Collected date/time	Received date/time
			N. Maroon	05/08/18 12:30	05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 18:05	05/13/18 18:05	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1111011	25	05/14/18 13:21	05/14/18 13:21	AMC

B7-SG-2 L993398-13 Air

			Collected by	Collected date/time	Received date/time
			N. Maroon	05/08/18 13:30	05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 18:50	05/13/18 18:50	AMC

B7-SG-8 L993398-14 Air

			Collected by	Collected date/time	Received date/time
			N. Maroon	05/08/18 13:50	05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 19:35	05/13/18 19:35	AMC

B8-SG-2 L993398-15 Air

			Collected by	Collected date/time	Received date/time
			N. Maroon	05/08/18 14:30	05/11/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 20:21	05/13/18 20:21	AMC

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B8-SG-8 L993398-16 Air			Collected by N. Maroon	Collected date/time 05/08/18 15:00	Received date/time 05/11/18 08:45	1Cp
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (MS) by Method TO-15	WG1110798	2	05/13/18 21:05	05/13/18 21:05	AMC	2Tc
B9-SG-2 L993398-17 Air			Collected by N. Maroon	Collected date/time 05/09/18 09:00	Received date/time 05/11/18 08:45	3Ss
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	4Cn
Volatile Organic Compounds (MS) by Method TO-15	WG1110801	2	05/13/18 10:50	05/13/18 10:50	AMC	5Sr
B9-SG-8 L993398-18 Air			Collected by N. Maroon	Collected date/time 05/09/18 09:30	Received date/time 05/11/18 08:45	6Qc
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	7Gl
Volatile Organic Compounds (MS) by Method TO-15	WG1110801	2	05/13/18 11:45	05/13/18 11:45	AMC	8Al
B10-SG-2 L993398-19 Air			Collected by N. Maroon	Collected date/time 05/09/18 10:00	Received date/time 05/11/18 08:45	9Sc
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (MS) by Method TO-15	WG1110801	2	05/13/18 12:35	05/13/18 12:35	AMC	
B10-SG-8 L993398-20 Air			Collected by N. Maroon	Collected date/time 05/09/18 10:30	Received date/time 05/11/18 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (MS) by Method TO-15	WG1110801	2	05/13/18 13:27	05/13/18 13:27	AMC	
B11-SG-2 L993398-21 Air			Collected by N. Maroon	Collected date/time 05/09/18 11:00	Received date/time 05/11/18 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (MS) by Method TO-15	WG1110801	2	05/13/18 14:18	05/13/18 14:18	AMC	
B11-SG-8 L993398-22 Air			Collected by N. Maroon	Collected date/time 05/09/18 11:30	Received date/time 05/11/18 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (MS) by Method TO-15	WG1110801	2	05/13/18 15:08	05/13/18 15:08	AMC	
Volatile Organic Compounds (MS) by Method TO-15	WG1111031	25	05/14/18 14:42	05/14/18 14:42	AMC	
B12-SG-2 L993398-23 Air			Collected by N. Maroon	Collected date/time 05/09/18 12:00	Received date/time 05/11/18 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (MS) by Method TO-15	WG1110801	2	05/13/18 15:58	05/13/18 15:58	AMC	

ACCOUNT:

Partner Engineering & Science - CA

PROJECT:

18-211700.2

SDG:

L993398

DATE/TIME:

05/18/18 12:45

PAGE:

5 of 75

B12-SG-8 L993398-24 Air

Collected by
N. Maroon

Collected date/time
05/09/18 12:30

Received date/time
05/11/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG1110801	2	05/13/18 16:52	05/13/18 16:52	AMC

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. 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 radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. 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.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

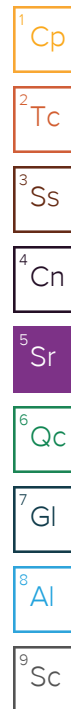
⁸ Al

⁹ 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	2.50	5.94	15.1	35.8		2	WG110506
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110506
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG110506
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110506
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110506
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110506
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110506
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110506
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG110506
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110506
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110506
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110506
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110506
Chloromethane	74-87-3	50.50	0.400	0.826	0.901	1.86		2	WG110506
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110506
Cyclohexane	110-82-7	84.20	0.400	1.38	0.507	1.75		2	WG110506
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110506
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110506
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110506
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110506
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110506
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110506
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110506
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110506
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110506
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110506
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110506
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110506
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110506
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110506
Ethanol	64-17-5	46.10	1.26	2.38	31.6	59.5		2	WG110506
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG110506
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110506
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110506
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.515	2.55		2	WG110506
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110506
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110506
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG110506
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110506
n-Hexane	110-54-3	86.20	0.400	1.41	0.488	1.72		2	WG110506
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110506
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.437	1.52		2	WG110506
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110506
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG110506
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110506
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110506
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110506
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110506
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110506
Propene	115-07-1	42.10	0.800	1.38	3.92	6.75		2	WG110506
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110506
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110506
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110506
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110506
Toluene	108-88-3	92.10	0.400	1.51	1.28	4.83		2	WG110506
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110506



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	0.400	2.18	ND	ND		2	WG1110506
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110506
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110506
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1110506
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110506
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	0.474	2.21		2	WG1110506
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110506
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110506
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110506
m&p-Xylene	1330-20-7	106	0.800	3.47	ND	ND		2	WG1110506
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1110506
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	2.04	5.51		2	WG1110506
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.5				WG1110506

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



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	2.50	5.94	10.8	25.6		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.749	2.33		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	0.555	1.15		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	0.735	2.53		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	296	558	E	2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	0.408	1.77		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.400	1.98		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	0.588	2.40		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	0.646	2.28		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.966	3.35		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	5.99	14.7		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	6.16	10.6		2	WG110798
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	35.6	134		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	0.841	4.51		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	1.08	4.68		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	0.412	1.79		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	7.79	21.0		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.5				WG1110798

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

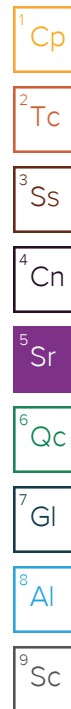
8Al

9Sc



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	2.50	5.94	36.3	86.4		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	5.45	17.4		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	13.1	29.1		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	5.95	18.5		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	5.00	13.2		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	2.13	4.41		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	11.6	40.1		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	0.633	2.51		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	16.9	31.9		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	4.74	20.5		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	2.42	11.9		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	14.5	59.5		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	15.3	53.8		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.87	6.48		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	7.49	22.1		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	4.25	10.4	<u>B</u>	2	WG110798
Propene	115-07-1	42.10	40.0	68.9	389	670		100	WG111031
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	1.51	10.2		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	38.1	143		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	0.927	4.97		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.95	9.59		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.595	2.92		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	24.3	114		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	16.0	69.3		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	4.93	21.4		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	9.22	24.9		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		105				WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.5				WG1111031

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

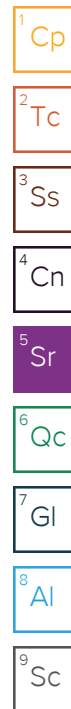
9

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	2.50	5.94	17.9	42.6		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	2.45	7.63		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	0.565	1.17		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	1.54	5.29		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	0.697	2.76		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	15.8	29.8	511	964		25	WG111031
Ethylbenzene	100-41-4	106	0.400	1.73	0.834	3.62		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.788	3.90		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	1.58	6.47		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	0.949	3.35		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.83	6.36		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	4.10	12.1		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	16.5	40.6		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	7.80	13.4		2	WG110798
Styrene	100-42-5	104	0.400	1.70	1.04	4.44		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	5.00	18.8	97.2	366		25	WG111031
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798





Collected date/time: 05/08/18 09:15

L993398

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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	2.10	9.08		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	0.849	3.68		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	8.41	22.7		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.2				WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		93.8				WG1111031

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

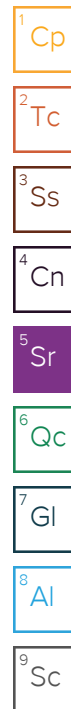
8Al

9Sc



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	2.50	5.94	8.64	20.5		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	0.960	3.07		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	0.780	2.69		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	18.0	34.0		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	1.00	4.36		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.665	3.26		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	1.40	5.71		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	0.933	3.29		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG110798
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	1.21	8.19		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	6.59	24.8		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	0.671	3.29		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.98	9.23		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	3.33	14.4		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	1.02	4.44		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	ND	ND		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.7				WG1110798

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

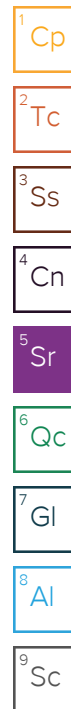
8Al

9Sc



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	2.50	5.94	23.4	55.5		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	1.07	3.42		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	1.37	2.82		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	0.678	2.33		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	12.9	24.3		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	0.988	4.28		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.735	3.61		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	1.31	5.37		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	1.08	3.82		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.599	2.08		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	3.56	10.5		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG110798
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	0.933	6.34		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	6.87	25.9		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	0.868	4.26		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.73	8.07		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	3.65	15.8		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	1.12	4.87		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	4.94	13.3		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1110798

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

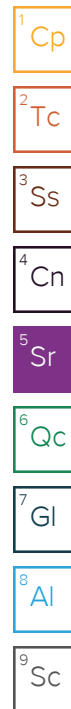


Collected date/time: 05/08/18 10:00

L993398

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	2.50	5.94	22.1	52.6		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	4.51	14.4		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	5.55	12.3		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.43	4.46		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	16.6	57.1		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	11.6	21.9		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	9.74	42.2		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	2.31	11.3		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	0.517	2.91		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	20.3	83.2		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	39.4	139		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	2.95	8.70		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110798
Propene	115-07-1	42.10	10.0	17.2	268	461		25	WG111031
Styrene	100-42-5	104	0.400	1.70	0.408	1.74		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	0.439	2.98		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	25.9	97.7		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798





Collected date/time: 05/08/18 10:00

L993398

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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.94	9.54		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.647	3.17		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	20.1	93.9		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	31.6	137		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	9.79	42.4		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	0.444	1.20		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		104				WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.0				WG1111031

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

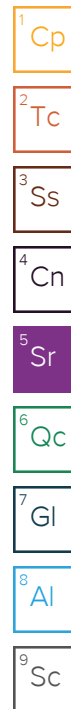
8Al

9Sc



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	2.50	5.94	11.6	27.6		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	3.15	10.1		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.49	4.63		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	0.510	1.05		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	14.4	49.7		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	4.53	8.54		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	10.1	44.0		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.478	2.35		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	38.3	157		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	70.2	248		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG110798
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	7.01	26.4		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	0.492	2.42		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	4.46	20.9		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	31.8	138		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	10.1	43.6		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	0.923	2.49		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1110798

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

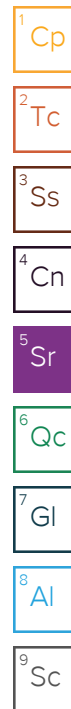
8Al

9Sc



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	2.50	5.94	39.6	94.0		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	1.69	5.41		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	0.901	6.05		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.75	5.44		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	7.45	36.2		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	4.21	14.5		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	0.630	5.36		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	14.4	27.2		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	7.22	31.3		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	1.66	8.16		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	5.77	23.6		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	4.32	15.2		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	4.73	14.0		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	75.2	130		2	WG110798
Styrene	100-42-5	104	0.400	1.70	0.514	2.19		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	2.36	16.0		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	5.00	18.8	45.5	172		25	WG111031
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.74	8.52		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.672	3.30		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	6.68	31.2		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	26.7	116		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	9.27	40.2		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	0.856	2.31		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		114				WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		93.8				WG1111031

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

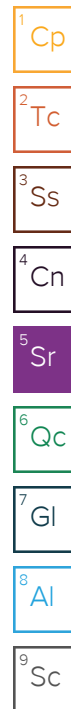
9

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	2.50	5.94	20.0	47.5		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	1.37	4.39		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.20	3.74		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	0.400	0.826		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	3.30	11.4		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	11.7	22.1		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	5.68	24.6		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.677	3.32		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	3.43	14.0		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	3.83	13.5		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.87	6.50		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	3.81	11.2		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	59.4	102		2	WG110798
Styrene	100-42-5	104	0.400	1.70	0.441	1.87		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	5.00	18.8	167	629		25	WG111031
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798





Collected date/time: 05/08/18 11:30

L993398

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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	0.627	3.08		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	4.59	21.5		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	19.3	83.5		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	6.54	28.4		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	5.24	14.1		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		110				WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.2				WG1111031

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

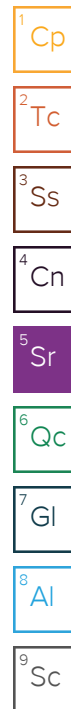
8Al

9Sc



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	2.50	5.94	33.3	79.2		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	2.93	9.37		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	4.88	10.8		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	2.05	6.38		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	3.96	19.3		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	0.548	1.13		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	0.596	3.07		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	4.00	13.8		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	11.2	21.0		2	WG110798
Ethylbenzene	100-41-4	106	5.00	21.7	263	1140		25	WG1111407
4-Ethyltoluene	622-96-8	120	0.400	1.96	13.1	64.5		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	3.89	15.9		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	2.51	8.85		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	9.07	44.6		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.77	6.16		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	6.30	18.6		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	5.10	12.5	<u>B</u>	2	WG110798
Propene	115-07-1	42.10	10.0	17.2	116	200		25	WG1111951
Styrene	100-42-5	104	0.400	1.70	8.66	36.8		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	33.4	126		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	13.2	64.6		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	4.98	24.4		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	3.93	18.4		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	10.0	43.4	951	4120		25	WG1111407
o-Xylene	95-47-6	106	5.00	21.7	355	1540		25	WG1111407
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	0.943	2.55		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		147		J1		WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1111407
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.5				WG1111951

Sample Narrative:

L993398-11 WG1110798: Surrogate failure due to matrix interference.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

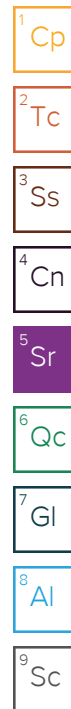
8Al

9Sc



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	2.50	5.94	16.6	39.5		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	0.512	1.64		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.455	1.41		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	1.12	3.86		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	7.59	14.3		2	WG110798
Ethylbenzene	100-41-4	106	5.00	21.7	293	1270		25	WG111011
4-Ethyltoluene	622-96-8	120	0.400	1.96	9.06	44.4		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	1.76	7.21		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	0.747	2.63		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	20.7	102		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.67	5.81		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	3.06	9.03		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	4.03	9.91	<u>B</u>	2	WG110798
Propene	115-07-1	42.10	0.800	1.38	16.5	28.5		2	WG110798
Styrene	100-42-5	104	0.400	1.70	12.0	51.1		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	20.1	75.6		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	5.80	28.5		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	2.39	11.7		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	10.0	43.4	1060	4620		25	WG1111011
o-Xylene	95-47-6	106	5.00	21.7	404	1750		25	WG1111011
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.06	2.88		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		147		J1		WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1111011

Sample Narrative:

L993398-12 WG1110798: Surrogate failure due to matrix interference.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Collected date/time: 05/08/18 13:30

L993398

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	2.50	5.94	16.0	37.9		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	0.778	2.48		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	0.458	3.07		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	4.67	22.7		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	0.990	3.41		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	4.97	9.36		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	2.68	11.6		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	1.47	7.22		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	1.06	4.35		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	0.440	1.55		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.74	6.05		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	2.99	8.81		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	1.40	2.42		2	WG110798
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	24.3	165		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	1.20	3.54		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	7.89	29.7		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.54	7.54		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.561	2.76		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	0.959	4.48		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	10.2	44.3		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	3.15	13.7		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	0.486	1.31		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1110798

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

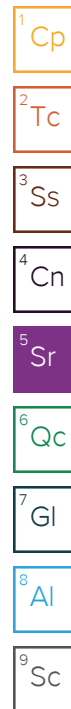
8Al

9Sc



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	2.50	5.94	18.9	44.8		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	1.41	4.50		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.524	1.63		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	1.94	6.68		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	1.25	4.96		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	5.16	9.72		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	5.49	23.8		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	1.78	7.27		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	1.59	5.62		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	4.14	12.2		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	0.414	1.70		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	10.2	17.5		2	WG110798
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	5.24	19.7		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	9.29	49.8		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	0.454	2.23		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.10	5.16		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	19.1	82.7		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	6.07	26.3		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	ND	ND		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.7				WG1110798

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

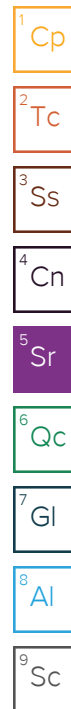
8Al

9Sc



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	2.50	5.94	15.7	37.4		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.410	1.27		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	0.933	4.54		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	0.583	1.20		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	0.705	2.43		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	7.71	14.5		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	0.684	2.80		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	2.42	8.53		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	1.22	4.22		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	2.70	7.95		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	5.45	13.4	<u>B</u>	2	WG110798
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG110798
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	0.817	2.41		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	1.33	5.02		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	0.476	2.34		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	1.11	4.83		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	5.09	13.7		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.5				WG1110798

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

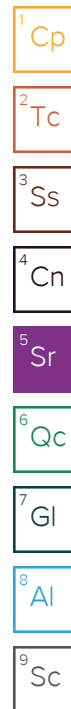
9

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	2.50	5.94	16.8	40.0		2	WG110798
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110798
Benzene	71-43-2	78.10	0.400	1.28	1.55	4.96		2	WG110798
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110798
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110798
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110798
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110798
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110798
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.678	2.11		2	WG110798
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110798
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110798
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110798
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110798
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110798
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110798
Cyclohexane	110-82-7	84.20	0.400	1.38	7.47	25.7		2	WG110798
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110798
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110798
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110798
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110798
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110798
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110798
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110798
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110798
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110798
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110798
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110798
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110798
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110798
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110798
Ethanol	64-17-5	46.10	1.26	2.38	13.3	25.0		2	WG110798
Ethylbenzene	100-41-4	106	0.400	1.73	0.726	3.15		2	WG110798
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110798
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110798
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110798
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110798
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110798
Heptane	142-82-5	100	0.400	1.64	21.3	87.2		2	WG110798
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110798
n-Hexane	110-54-3	86.20	0.400	1.41	38.3	135		2	WG110798
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110798
Methylene Chloride	75-09-2	84.90	0.400	1.39	5.74	19.9		2	WG110798
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110798
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG110798
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110798
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110798
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110798
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110798
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110798
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG110798
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110798
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110798
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110798
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110798
Toluene	108-88-3	92.10	0.400	1.51	4.18	15.7		2	WG110798
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110798



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	0.400	2.18	ND	ND		2	WG1110798
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110798
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110798
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1110798
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110798
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110798
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110798
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110798
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110798
m&p-Xylene	1330-20-7	106	0.800	3.47	2.44	10.6		2	WG1110798
o-Xylene	95-47-6	106	0.400	1.73	0.830	3.60		2	WG1110798
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	6.07	16.4		2	WG1110798
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1110798

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

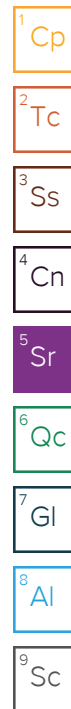
8Al

9Sc



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	2.50	5.94	19.5	46.4		2	WG110801
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110801
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG110801
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110801
Bromodichloromethane	75-27-4	164	0.400	2.68	3.67	24.6		2	WG110801
Bromoform	75-25-2	253	1.20	12.4	3.84	39.7		2	WG110801
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110801
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110801
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG110801
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110801
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110801
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110801
Chloroform	67-66-3	119	0.400	1.95	2.04	9.93		2	WG110801
Chloromethane	74-87-3	50.50	0.400	0.826	0.461	0.953		2	WG110801
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110801
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG110801
Dibromochloromethane	124-48-1	208	0.400	3.40	6.05	51.5		2	WG110801
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110801
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110801
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110801
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110801
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110801
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110801
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110801
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110801
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110801
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110801
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110801
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110801
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110801
Ethanol	64-17-5	46.10	1.26	2.38	14.4	27.1		2	WG110801
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG110801
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110801
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110801
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110801
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110801
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110801
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG110801
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110801
n-Hexane	110-54-3	86.20	0.400	1.41	0.407	1.43		2	WG110801
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110801
Methylene Chloride	75-09-2	84.90	0.400	1.39	3.19	11.1		2	WG110801
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110801
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG110801
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110801
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110801
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110801
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110801
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110801
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG110801
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110801
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110801
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110801
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110801
Toluene	108-88-3	92.10	0.400	1.51	0.845	3.18		2	WG110801
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110801



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	0.400	2.18	ND	ND		2	WG1110801
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110801
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110801
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1110801
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110801
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110801
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110801
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110801
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110801
m&p-Xylene	1330-20-7	106	0.800	3.47	ND	ND		2	WG1110801
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1110801
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	5.97	16.1		2	WG1110801
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.5				WG1110801

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

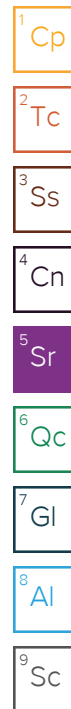
8Al

9Sc



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	2.50	5.94	439	1040	E	2	WG110801
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110801
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG110801
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110801
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110801
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110801
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110801
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110801
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.741	2.31		2	WG110801
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110801
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110801
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110801
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110801
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110801
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110801
Cyclohexane	110-82-7	84.20	0.400	1.38	1.16	3.99		2	WG110801
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110801
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110801
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110801
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110801
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110801
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110801
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110801
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110801
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110801
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110801
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110801
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110801
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110801
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110801
Ethanol	64-17-5	46.10	1.26	2.38	25.7	48.4		2	WG110801
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG110801
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110801
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110801
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110801
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110801
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110801
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG110801
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110801
n-Hexane	110-54-3	86.20	0.400	1.41	0.465	1.64		2	WG110801
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110801
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG110801
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110801
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	8.59	25.3		2	WG110801
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110801
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110801
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110801
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110801
2-Propanol	67-63-0	60.10	2.50	6.15	107	262	E	2	WG110801
Propene	115-07-1	42.10	0.800	1.38	11.9	20.5		2	WG110801
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110801
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110801
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110801
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110801
Toluene	108-88-3	92.10	0.400	1.51	0.845	3.18		2	WG110801
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110801



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	0.400	2.18	ND	ND		2	WG1110801
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110801
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110801
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	0.467	2.29		2	WG1110801
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110801
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110801
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110801
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110801
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110801
m&p-Xylene	1330-20-7	106	0.800	3.47	1.11	4.81		2	WG1110801
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1110801
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	3.19	8.61		2	WG1110801
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.1				WG1110801

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

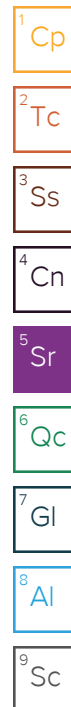
8Al

9Sc



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	2.50	5.94	60.2	143		2	WG110801
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110801
Benzene	71-43-2	78.10	0.400	1.28	10.8	34.4		2	WG110801
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110801
Bromodichloromethane	75-27-4	164	0.400	2.68	1.27	8.49		2	WG110801
Bromoform	75-25-2	253	1.20	12.4	1.28	13.2		2	WG110801
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110801
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110801
Carbon disulfide	75-15-0	76.10	0.400	1.24	11.8	36.7		2	WG110801
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110801
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110801
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110801
Chloroform	67-66-3	119	0.400	1.95	0.815	3.97		2	WG110801
Chloromethane	74-87-3	50.50	0.400	0.826	1.12	2.31		2	WG110801
2-Chlorotoluene	95-49-8	126	0.400	2.06	0.473	2.44		2	WG110801
Cyclohexane	110-82-7	84.20	0.400	1.38	3.31	11.4		2	WG110801
Dibromochloromethane	124-48-1	208	0.400	3.40	1.96	16.7		2	WG110801
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110801
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110801
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110801
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110801
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110801
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110801
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110801
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110801
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110801
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110801
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110801
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110801
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110801
Ethanol	64-17-5	46.10	1.26	2.38	10.0	18.9		2	WG110801
Ethylbenzene	100-41-4	106	0.400	1.73	7.21	31.3		2	WG110801
4-Ethyltoluene	622-96-8	120	0.400	1.96	9.89	48.5		2	WG110801
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110801
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110801
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110801
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110801
Heptane	142-82-5	100	0.400	1.64	2.44	9.97		2	WG110801
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110801
n-Hexane	110-54-3	86.20	0.400	1.41	3.71	13.1		2	WG110801
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110801
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.982	3.41		2	WG110801
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110801
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	10.3	30.5		2	WG110801
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110801
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110801
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110801
Naphthalene	91-20-3	128	1.26	6.60	2.81	14.7	B	2	WG110801
2-Propanol	67-63-0	60.10	2.50	6.15	4.18	10.3		2	WG110801
Propene	115-07-1	42.10	0.800	1.38	55.3	95.2		2	WG110801
Styrene	100-42-5	104	0.400	1.70	0.613	2.61		2	WG110801
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	0.639	4.39		2	WG110801
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110801
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110801
Toluene	108-88-3	92.10	0.400	1.51	41.6	157		2	WG110801
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110801





Collected date/time: 05/09/18 10:00

L993398

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	0.400	2.18	ND	ND		2	WG1110801
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110801
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110801
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	13.2	65.0		2	WG1110801
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	3.61	17.7		2	WG1110801
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110801
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110801
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110801
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110801
m&p-Xylene	1330-20-7	106	0.800	3.47	28.3	123		2	WG1110801
o-Xylene	95-47-6	106	0.400	1.73	11.6	50.2		2	WG1110801
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	5.71	15.4		2	WG1110801
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.9				WG1110801

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

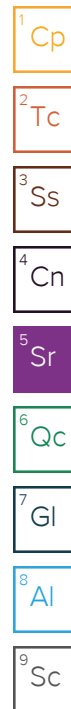
8Al

9Sc



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	2.50	5.94	19.3	45.9		2	WG1110801
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1110801
Benzene	71-43-2	78.10	0.400	1.28	0.594	1.90		2	WG1110801
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1110801
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1110801
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1110801
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1110801
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1110801
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.53	4.78		2	WG1110801
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1110801
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1110801
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1110801
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1110801
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1110801
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1110801
Cyclohexane	110-82-7	84.20	0.400	1.38	0.558	1.92		2	WG1110801
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1110801
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1110801
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1110801
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1110801
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1110801
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1110801
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1110801
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1110801
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1110801
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1110801
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1110801
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1110801
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1110801
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1110801
Ethanol	64-17-5	46.10	1.26	2.38	9.82	18.5		2	WG1110801
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG1110801
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1110801
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1110801
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG1110801
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1110801
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1110801
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1110801
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1110801
n-Hexane	110-54-3	86.20	0.400	1.41	0.670	2.36		2	WG1110801
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1110801
Methylene Chloride	75-09-2	84.90	0.400	1.39	4.76	16.5		2	WG1110801
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1110801
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1110801
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1110801
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1110801
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1110801
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1110801
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1110801
Propene	115-07-1	42.10	0.800	1.38	10.2	17.5		2	WG1110801
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1110801
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	0.442	3.03		2	WG1110801
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1110801
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1110801
Toluene	108-88-3	92.10	0.400	1.51	1.96	7.38		2	WG1110801
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1110801



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	0.400	2.18	ND	ND		2	WG1110801
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110801
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110801
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1110801
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110801
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110801
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110801
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110801
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110801
m&p-Xylene	1330-20-7	106	0.800	3.47	ND	ND		2	WG1110801
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1110801
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	4.63	12.5		2	WG1110801
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1110801

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

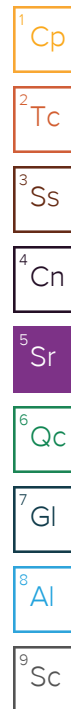
8Al

9Sc



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	2.50	5.94	4.96	11.8		2	WG1110801
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1110801
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG1110801
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1110801
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1110801
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1110801
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1110801
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1110801
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1110801
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1110801
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1110801
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1110801
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1110801
Chloromethane	74-87-3	50.50	0.400	0.826	0.472	0.975		2	WG1110801
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1110801
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1110801
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1110801
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1110801
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1110801
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1110801
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1110801
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1110801
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1110801
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1110801
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1110801
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1110801
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1110801
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1110801
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1110801
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1110801
Ethanol	64-17-5	46.10	1.26	2.38	3.43	6.47		2	WG1110801
Ethylbenzene	100-41-4	106	0.400	1.73	2.10	9.11		2	WG1110801
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1110801
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1110801
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG1110801
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1110801
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1110801
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1110801
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1110801
n-Hexane	110-54-3	86.20	0.400	1.41	1.05	3.70		2	WG1110801
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1110801
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.440	1.53		2	WG1110801
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1110801
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1110801
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1110801
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1110801
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1110801
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1110801
2-Propanol	67-63-0	60.10	2.50	6.15	2.75	6.75		2	WG1110801
Propene	115-07-1	42.10	0.800	1.38	8.08	13.9		2	WG1110801
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1110801
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1110801
Tetrachloroethylene	127-18-4	166	0.400	2.72	0.612	4.16		2	WG1110801
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1110801
Toluene	108-88-3	92.10	0.400	1.51	0.715	2.69		2	WG1110801
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1110801



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	0.400	2.18	ND	ND		2	WG1110801
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110801
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110801
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1110801
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110801
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110801
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110801
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110801
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110801
m&p-Xylene	1330-20-7	106	0.800	3.47	8.34	36.2		2	WG1110801
o-Xylene	95-47-6	106	0.400	1.73	3.24	14.0		2	WG1110801
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	2.07	5.59		2	WG1110801
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.0				WG1110801

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

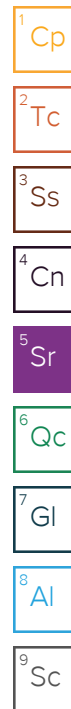
8Al

9Sc



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	2.50	5.94	25.3	60.1		2	WG1110801
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1110801
Benzene	71-43-2	78.10	0.400	1.28	2.01	6.42		2	WG1110801
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1110801
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1110801
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1110801
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1110801
1,3-Butadiene	106-99-0	54.10	4.00	8.85	4.80	10.6		2	WG1110801
Carbon disulfide	75-15-0	76.10	0.400	1.24	0.670	2.09		2	WG1110801
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1110801
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1110801
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1110801
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1110801
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1110801
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1110801
Cyclohexane	110-82-7	84.20	0.400	1.38	10.5	36.3		2	WG1110801
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1110801
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1110801
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1110801
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1110801
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1110801
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1110801
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1110801
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1110801
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1110801
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1110801
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1110801
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1110801
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1110801
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1110801
Ethanol	64-17-5	46.10	1.26	2.38	2.96	5.59		2	WG1110801
Ethylbenzene	100-41-4	106	0.400	1.73	40.5	176		2	WG1110801
4-Ethyltoluene	622-96-8	120	0.400	1.96	1.54	7.57		2	WG1110801
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1110801
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG1110801
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1110801
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1110801
Heptane	142-82-5	100	0.400	1.64	15.5	63.3		2	WG1110801
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1110801
n-Hexane	110-54-3	86.20	0.400	1.41	32.2	114		2	WG1110801
Isopropylbenzene	98-82-8	120.20	0.400	1.97	1.54	7.56		2	WG1110801
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1110801
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1110801
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	4.02	11.9		2	WG1110801
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1110801
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1110801
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1110801
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1110801
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1110801
Propene	115-07-1	42.10	10.0	17.2	63.4	109		25	WG1111031
Styrene	100-42-5	104	0.400	1.70	2.74	11.6		2	WG1110801
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1110801
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1110801
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1110801
Toluene	108-88-3	92.10	0.400	1.51	5.37	20.2		2	WG1110801
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1110801



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	0.400	2.18	ND	ND		2	WG1110801
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110801
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110801
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.48	7.25		2	WG1110801
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.580	2.85		2	WG1110801
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110801
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110801
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110801
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110801
m&p-Xylene	1330-20-7	106	10.0	43.4	71.8	311		25	WG1111031
o-Xylene	95-47-6	106	0.400	1.73	73.3	318		2	WG1110801
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	1.03	2.78		2	WG1110801
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.5				WG1110801
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.5				WG1111031

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

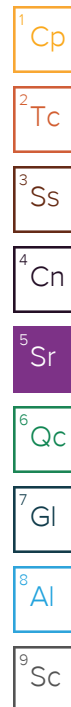
8Al

9Sc



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	2.50	5.94	10.3	24.4		2	WG110801
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110801
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG110801
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110801
Bromodichloromethane	75-27-4	164	0.400	2.68	0.884	5.93		2	WG110801
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110801
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110801
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110801
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG110801
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110801
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110801
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110801
Chloroform	67-66-3	119	0.400	1.95	0.630	3.07		2	WG110801
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110801
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110801
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG110801
Dibromochloromethane	124-48-1	208	0.400	3.40	1.36	11.6		2	WG110801
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110801
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110801
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110801
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110801
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110801
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110801
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110801
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110801
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110801
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110801
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110801
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110801
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110801
Ethanol	64-17-5	46.10	1.26	2.38	5.89	11.1		2	WG110801
Ethylbenzene	100-41-4	106	0.400	1.73	0.658	2.85		2	WG110801
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110801
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110801
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110801
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110801
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110801
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG110801
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110801
n-Hexane	110-54-3	86.20	0.400	1.41	0.538	1.90		2	WG110801
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110801
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.900	3.13		2	WG110801
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110801
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG110801
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110801
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110801
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110801
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110801
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110801
Propene	115-07-1	42.10	0.800	1.38	3.25	5.59		2	WG110801
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110801
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110801
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110801
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110801
Toluene	108-88-3	92.10	0.400	1.51	1.91	7.19		2	WG110801
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110801



L993398

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	0.400	2.18	ND	ND		2	WG1110801
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110801
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110801
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1110801
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110801
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110801
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110801
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110801
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110801
m&p-Xylene	1330-20-7	106	0.800	3.47	2.49	10.8		2	WG1110801
o-Xylene	95-47-6	106	0.400	1.73	0.797	3.46		2	WG1110801
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	24.7	66.7		2	WG1110801
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.6				WG1110801

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

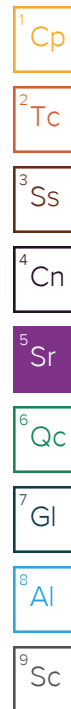
8Al

9Sc



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	2.50	5.94	7.63	18.1		2	WG110801
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG110801
Benzene	71-43-2	78.10	0.400	1.28	0.441	1.41		2	WG110801
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG110801
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG110801
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG110801
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG110801
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG110801
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG110801
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG110801
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG110801
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG110801
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG110801
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG110801
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG110801
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG110801
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG110801
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG110801
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG110801
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG110801
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG110801
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG110801
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG110801
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG110801
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG110801
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG110801
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG110801
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG110801
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG110801
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG110801
Ethanol	64-17-5	46.10	1.26	2.38	3.41	6.43		2	WG110801
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG110801
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG110801
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG110801
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG110801
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG110801
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG110801
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG110801
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG110801
n-Hexane	110-54-3	86.20	0.400	1.41	0.526	1.85		2	WG110801
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG110801
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.676	2.35		2	WG110801
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG110801
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG110801
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG110801
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG110801
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG110801
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG110801
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG110801
Propene	115-07-1	42.10	0.800	1.38	5.72	9.84		2	WG110801
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG110801
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG110801
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG110801
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG110801
Toluene	108-88-3	92.10	0.400	1.51	1.11	4.19		2	WG110801
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG110801



L993398

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	0.400	2.18	ND	ND		2	WG1110801
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1110801
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1110801
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1110801
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1110801
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1110801
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1110801
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1110801
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1110801
m&p-Xylene	1330-20-7	106	0.800	3.47	ND	ND		2	WG1110801
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1110801
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	15.1	40.7		2	WG1110801
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.8				WG1110801

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3309302-3 05/12/18 10:35

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3309302-3 05/12/18 10:35

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	0.166	U	0.154	0.630
2-Propanol	0.108	U	0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
1,1-Difluoroethane	U		0.0325	0.200
(S) 1,4-Bromofluorobenzene	93.1			60.0-140

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

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

(LCS) R3309302-1 05/12/18 08:53 • (LCSD) R3309302-2 05/12/18 09:44

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.24	3.27	86.4	87.3	52.0-158			0.954	25
Propene	3.75	3.14	3.16	83.8	84.2	54.0-155			0.509	25
Dichlorodifluoromethane	3.75	3.02	3.04	80.5	81.2	69.0-143			0.841	25
1,2-Dichlorotetrafluoroethane	3.75	3.67	3.71	97.8	98.9	70.0-130			1.10	25

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

(LCS) R3309302-1 05/12/18 08:53 • (LCSD) R3309302-2 05/12/18 09:44

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Chloromethane	3.75	3.20	3.26	85.4	87.0	70.0-130			1.84	25
Vinyl chloride	3.75	3.36	3.44	89.6	91.7	70.0-130			2.26	25
1,3-Butadiene	3.75	3.30	3.34	87.9	89.1	70.0-130			1.36	25
Bromomethane	3.75	3.49	3.58	93.1	95.3	70.0-130			2.35	25
Chloroethane	3.75	3.43	3.44	91.6	91.8	70.0-130			0.188	25
Trichlorofluoromethane	3.75	3.52	3.51	93.9	93.7	70.0-130			0.173	25
1,1,2-Trichlorotrifluoroethane	3.75	3.48	3.57	92.7	95.3	70.0-130			2.74	25
1,1-Dichloroethene	3.75	3.32	3.39	88.4	90.5	70.0-130			2.35	25
1,1-Dichloroethane	3.75	3.38	3.42	90.0	91.2	70.0-130			1.31	25
Acetone	3.75	3.39	3.43	90.4	91.4	70.0-130			1.06	25
2-Propanol	3.75	3.41	3.45	90.8	92.1	66.0-150			1.41	25
Carbon disulfide	3.75	3.48	3.55	92.8	94.6	70.0-130			1.93	25
Methylene Chloride	3.75	3.20	3.23	85.2	86.2	70.0-130			1.11	25
MTBE	3.75	3.41	3.48	91.0	92.8	70.0-130			1.86	25
trans-1,2-Dichloroethene	3.75	3.55	3.62	94.6	96.5	70.0-130			2.06	25
n-Hexane	3.75	3.33	3.39	88.8	90.4	70.0-130			1.81	25
Vinyl acetate	3.75	3.40	3.47	90.8	92.4	70.0-130			1.80	25
Methyl Ethyl Ketone	3.75	3.50	3.59	93.3	95.8	70.0-130			2.65	25
cis-1,2-Dichloroethene	3.75	3.54	3.57	94.5	95.2	70.0-130			0.756	25
Chloroform	3.75	3.49	3.57	93.1	95.2	70.0-130			2.24	25
Cyclohexane	3.75	3.55	3.57	94.7	95.3	70.0-130			0.601	25
1,1,1-Trichloroethane	3.75	3.50	3.55	93.3	94.6	70.0-130			1.40	25
Carbon tetrachloride	3.75	3.59	3.65	95.8	97.3	70.0-130			1.55	25
Benzene	3.75	3.50	3.56	93.4	95.0	70.0-130			1.63	25
1,2-Dichloroethane	3.75	3.41	3.41	90.8	90.9	70.0-130			0.111	25
Heptane	3.75	3.24	3.26	86.5	86.8	70.0-130			0.365	25
Trichloroethylene	3.75	3.63	3.67	96.9	97.9	70.0-130			1.06	25
1,2-Dichloropropane	3.75	3.43	3.48	91.6	92.7	70.0-130			1.30	25
1,4-Dioxane	3.75	3.91	3.91	104	104	70.0-152			0.00588	25
Bromodichloromethane	3.75	3.58	3.61	95.4	96.3	70.0-130			0.925	25
cis-1,3-Dichloropropene	3.75	3.63	3.66	96.7	97.5	70.0-130			0.802	25
4-Methyl-2-pentanone (MIBK)	3.75	3.36	3.40	89.7	90.8	70.0-142			1.18	25
Toluene	3.75	3.62	3.67	96.7	97.9	70.0-130			1.24	25
trans-1,3-Dichloropropene	3.75	3.65	3.70	97.3	98.8	70.0-130			1.57	25
1,1,2-Trichloroethane	3.75	3.60	3.67	96.0	97.8	70.0-130			1.87	25
Tetrachloroethylene	3.75	3.67	3.73	97.9	99.4	70.0-130			1.52	25
Methyl Butyl Ketone	3.75	3.54	3.56	94.4	95.0	70.0-150			0.627	25
Dibromochloromethane	3.75	3.73	3.79	99.5	101	70.0-130			1.64	25
1,2-Dibromoethane	3.75	3.67	3.70	97.8	98.7	70.0-130			0.940	25
Chlorobenzene	3.75	3.50	3.52	93.3	94.0	70.0-130			0.740	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3309302-1 05/12/18 08:53 • (LCSD) R3309302-2 05/12/18 09:44

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Ethylbenzene	3.75	3.62	3.66	96.4	97.5	70.0-130			1.09	25
m&p-Xylene	7.50	7.13	7.21	95.0	96.1	70.0-130			1.09	25
o-Xylene	3.75	3.63	3.67	96.8	98.0	70.0-130			1.23	25
Styrene	3.75	3.73	3.76	99.4	100	70.0-130			0.987	25
Bromoform	3.75	3.86	3.85	103	103	70.0-130			0.267	25
1,1,2,2-Tetrachloroethane	3.75	3.60	3.61	96.1	96.4	70.0-130			0.318	25
4-Ethyltoluene	3.75	3.64	3.66	97.2	97.6	70.0-130			0.432	25
1,3,5-Trimethylbenzene	3.75	3.62	3.59	96.5	95.7	70.0-130			0.838	25
1,2,4-Trimethylbenzene	3.75	3.61	3.63	96.4	96.7	70.0-130			0.384	25
1,3-Dichlorobenzene	3.75	3.76	3.73	100	99.5	70.0-130			0.863	25
1,4-Dichlorobenzene	3.75	3.69	3.66	98.5	97.6	70.0-130			0.891	25
Benzyl Chloride	3.75	3.89	3.87	104	103	70.0-144			0.477	25
1,2-Dichlorobenzene	3.75	3.65	3.59	97.4	95.8	70.0-130			1.70	25
1,2,4-Trichlorobenzene	3.75	4.57	4.42	122	118	70.0-155			3.49	25
Hexachloro-1,3-butadiene	3.75	3.80	3.78	101	101	70.0-145			0.345	25
Naphthalene	3.75	4.41	4.24	118	113	70.0-155			3.91	25
Allyl Chloride	3.75	3.25	3.26	86.8	86.9	70.0-130			0.106	25
2-Chlorotoluene	3.75	3.59	3.58	95.7	95.6	70.0-130			0.161	25
Methyl Methacrylate	3.75	3.61	3.62	96.3	96.6	70.0-130			0.282	25
Tetrahydrofuran	3.75	3.20	3.24	85.3	86.4	70.0-140			1.24	25
2,2,4-Trimethylpentane	3.75	3.32	3.39	88.6	90.5	70.0-130			2.12	25
Vinyl Bromide	3.75	3.63	3.71	96.8	98.9	70.0-130			2.14	25
Isopropylbenzene	3.75	3.64	3.66	97.0	97.7	70.0-130			0.698	25
1,1-Difluoroethane	3.75	3.44	3.50	91.7	93.2	70.0-130			1.60	25
(S) 1,4-Bromofluorobenzene				99.6	99.7	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3309400-3 05/13/18 09:29

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3309400-3 05/13/18 09:29

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	0.277	J	0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
1,1-Difluoroethane	U		0.0325	0.200
(S) 1,4-Bromofluorobenzene	98.1			60.0-140

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3309400-1 05/13/18 07:55 • (LCSD) R3309400-2 05/13/18 08:41

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.77	3.76	101	100	52.0-158			0.499	25
Propene	3.75	4.15	4.14	111	110	54.0-155			0.133	25
Dichlorodifluoromethane	3.75	3.99	3.97	107	106	69.0-143			0.584	25
1,2-Dichlorotetrafluoroethane	3.75	4.09	4.08	109	109	70.0-130			0.288	25



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

(LCS) R3309400-1 05/13/18 07:55 • (LCSD) R3309400-2 05/13/18 08:41

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloromethane	3.75	4.30	4.29	115	114	70.0-130			0.184	25
Vinyl chloride	3.75	4.30	4.27	115	114	70.0-130			0.821	25
1,3-Butadiene	3.75	4.13	4.13	110	110	70.0-130			0.0121	25
Bromomethane	3.75	3.67	3.69	97.8	98.5	70.0-130			0.641	25
Chloroethane	3.75	4.12	4.08	110	109	70.0-130			0.956	25
Trichlorofluoromethane	3.75	4.12	4.09	110	109	70.0-130			0.706	25
1,1,2-Trichlorotrifluoroethane	3.75	4.07	4.05	109	108	70.0-130			0.480	25
1,1-Dichloroethene	3.75	4.21	4.16	112	111	70.0-130			1.13	25
1,1-Dichloroethane	3.75	4.15	4.13	111	110	70.0-130			0.574	25
Acetone	3.75	4.28	4.28	114	114	70.0-130			0.0525	25
2-Propanol	3.75	4.31	4.26	115	114	66.0-150			1.15	25
Carbon disulfide	3.75	4.13	4.11	110	110	70.0-130			0.525	25
Methylene Chloride	3.75	4.10	4.09	109	109	70.0-130			0.339	25
MTBE	3.75	4.13	4.11	110	109	70.0-130			0.663	25
trans-1,2-Dichloroethene	3.75	4.20	4.19	112	112	70.0-130			0.331	25
n-Hexane	3.75	4.11	4.08	110	109	70.0-130			0.620	25
Vinyl acetate	3.75	4.52	4.51	121	120	70.0-130			0.238	25
Methyl Ethyl Ketone	3.75	4.19	4.14	112	110	70.0-130			1.35	25
cis-1,2-Dichloroethene	3.75	4.21	4.19	112	112	70.0-130			0.376	25
Chloroform	3.75	4.08	4.06	109	108	70.0-130			0.491	25
Cyclohexane	3.75	4.10	4.04	109	108	70.0-130			1.45	25
1,1,1-Trichloroethane	3.75	4.09	4.07	109	109	70.0-130			0.360	25
Carbon tetrachloride	3.75	4.06	4.05	108	108	70.0-130			0.381	25
Benzene	3.75	4.11	4.09	110	109	70.0-130			0.539	25
1,2-Dichloroethane	3.75	4.20	4.19	112	112	70.0-130			0.219	25
Heptane	3.75	4.29	4.30	114	115	70.0-130			0.147	25
Trichloroethylene	3.75	4.04	4.05	108	108	70.0-130			0.161	25
1,2-Dichloropropane	3.75	4.17	4.15	111	111	70.0-130			0.678	25
1,4-Dioxane	3.75	4.37	4.40	117	117	70.0-152			0.611	25
Bromodichloromethane	3.75	4.16	4.15	111	111	70.0-130			0.297	25
cis-1,3-Dichloropropene	3.75	4.20	4.18	112	111	70.0-130			0.639	25
4-Methyl-2-pentanone (MIBK)	3.75	4.36	4.35	116	116	70.0-142			0.187	25
Toluene	3.75	4.12	4.11	110	110	70.0-130			0.116	25
trans-1,3-Dichloropropene	3.75	4.24	4.28	113	114	70.0-130			0.903	25
1,1,2-Trichloroethane	3.75	4.04	4.02	108	107	70.0-130			0.330	25
Tetrachloroethylene	3.75	4.00	3.98	107	106	70.0-130			0.659	25
Methyl Butyl Ketone	3.75	4.71	4.64	126	124	70.0-150			1.46	25
Dibromochloromethane	3.75	4.19	4.19	112	112	70.0-130			0.0159	25
1,2-Dibromoethane	3.75	4.22	4.20	112	112	70.0-130			0.324	25
Chlorobenzene	3.75	4.15	4.15	111	111	70.0-130			0.0250	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



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

(LCS) R3309400-1 05/13/18 07:55 • (LCSD) R3309400-2 05/13/18 08:41

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	3.75	4.21	4.20	112	112	70.0-130			0.259	25
m&p-Xylene	7.50	8.29	8.26	111	110	70.0-130			0.314	25
o-Xylene	3.75	4.17	4.17	111	111	70.0-130			0.0710	25
Styrene	3.75	4.28	4.26	114	114	70.0-130			0.472	25
Bromoform	3.75	4.22	4.19	113	112	70.0-130			0.918	25
1,1,2,2-Tetrachloroethane	3.75	4.24	4.21	113	112	70.0-130			0.556	25
4-Ethyltoluene	3.75	4.25	4.22	113	112	70.0-130			0.668	25
1,3,5-Trimethylbenzene	3.75	4.21	4.19	112	112	70.0-130			0.436	25
1,2,4-Trimethylbenzene	3.75	4.21	4.19	112	112	70.0-130			0.307	25
1,3-Dichlorobenzene	3.75	4.21	4.18	112	111	70.0-130			0.805	25
1,4-Dichlorobenzene	3.75	4.33	4.26	115	114	70.0-130			1.61	25
Benzyl Chloride	3.75	4.56	4.48	122	119	70.0-144			1.74	25
1,2-Dichlorobenzene	3.75	4.16	4.12	111	110	70.0-130			0.910	25
1,2,4-Trichlorobenzene	3.75	4.37	4.25	117	113	70.0-155			2.86	25
Hexachloro-1,3-butadiene	3.75	4.03	4.03	107	107	70.0-145			0.00404	25
Naphthalene	3.75	4.35	4.20	116	112	70.0-155			3.42	25
Allyl Chloride	3.75	4.24	4.25	113	113	70.0-130			0.125	25
2-Chlorotoluene	3.75	4.23	4.22	113	112	70.0-130			0.403	25
Methyl Methacrylate	3.75	4.34	4.33	116	115	70.0-130			0.287	25
Tetrahydrofuran	3.75	4.27	4.26	114	114	70.0-140			0.313	25
2,2,4-Trimethylpentane	3.75	4.17	4.15	111	111	70.0-130			0.643	25
Vinyl Bromide	3.75	4.04	4.02	108	107	70.0-130			0.500	25
Isopropylbenzene	3.75	4.18	4.15	111	111	70.0-130			0.615	25
1,1-Difluoroethane	3.75	4.36	4.35	116	116	70.0-130			0.217	25
(S) 1,4-Bromofluorobenzene				101	100	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3309395-3 05/13/18 09:43

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc



Method Blank (MB)

(MB) R3309395-3 05/13/18 09:43

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	0.162	U	0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
1,1-Difluoroethane	U		0.0325	0.200
(S) 1,4-Bromofluorobenzene	93.7			60.0-140

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3309395-1 05/13/18 08:01 • (LCSD) R3309395-2 05/13/18 08:51

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	2.72	3.12	72.6	83.3	52.0-158			13.7	25
Propene	3.75	3.07	3.07	81.9	81.9	54.0-155			0.0640	25
Dichlorodifluoromethane	3.75	2.92	2.82	77.9	75.2	69.0-143			3.46	25
1,2-Dichlorotetrafluoroethane	3.75	3.62	3.55	96.4	94.7	70.0-130			1.81	25

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

(LCS) R3309395-1 05/13/18 08:01 • (LCSD) R3309395-2 05/13/18 08:51

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloromethane	3.75	3.17	3.18	84.6	84.8	70.0-130			0.201	25
Vinyl chloride	3.75	3.35	3.40	89.2	90.7	70.0-130			1.65	25
1,3-Butadiene	3.75	3.19	3.22	85.1	85.8	70.0-130			0.831	25
Bromomethane	3.75	3.53	3.54	94.1	94.4	70.0-130			0.366	25
Chloroethane	3.75	3.38	3.40	90.0	90.7	70.0-130			0.718	25
Trichlorofluoromethane	3.75	3.47	3.53	92.7	94.1	70.0-130			1.58	25
1,1,2-Trichlorotrifluoroethane	3.75	3.54	3.54	94.4	94.4	70.0-130			0.0413	25
1,1-Dichloroethene	3.75	3.28	3.33	87.4	88.7	70.0-130			1.49	25
1,1-Dichloroethane	3.75	3.37	3.37	89.9	89.9	70.0-130			0.0381	25
Acetone	3.75	3.24	3.28	86.3	87.4	70.0-130			1.26	25
2-Propanol	3.75	3.26	3.28	86.8	87.6	66.0-150			0.834	25
Carbon disulfide	3.75	3.51	3.49	93.6	93.1	70.0-130			0.550	25
Methylene Chloride	3.75	3.13	3.12	83.4	83.3	70.0-130			0.185	25
MTBE	3.75	3.40	3.40	90.6	90.7	70.0-130			0.150	25
trans-1,2-Dichloroethene	3.75	3.57	3.59	95.2	95.7	70.0-130			0.484	25
n-Hexane	3.75	3.29	3.30	87.7	88.1	70.0-130			0.411	25
Vinyl acetate	3.75	3.34	3.34	89.0	89.0	70.0-130			0.0656	25
Methyl Ethyl Ketone	3.75	3.53	3.51	94.1	93.7	70.0-130			0.448	25
cis-1,2-Dichloroethene	3.75	3.50	3.51	93.3	93.7	70.0-130			0.435	25
Chloroform	3.75	3.51	3.49	93.7	93.1	70.0-130			0.664	25
Cyclohexane	3.75	3.55	3.55	94.6	94.6	70.0-130			0.00158	25
1,1,1-Trichloroethane	3.75	3.49	3.50	93.1	93.3	70.0-130			0.222	25
Carbon tetrachloride	3.75	3.60	3.62	96.0	96.5	70.0-130			0.504	25
Benzene	3.75	3.52	3.49	93.8	93.1	70.0-130			0.773	25
1,2-Dichloroethane	3.75	3.34	3.31	88.9	88.2	70.0-130			0.866	25
Heptane	3.75	3.18	3.15	84.7	83.9	70.0-130			0.959	25
Trichloroethylene	3.75	3.63	3.58	96.8	95.5	70.0-130			1.31	25
1,2-Dichloropropane	3.75	3.42	3.41	91.2	91.0	70.0-130			0.242	25
1,4-Dioxane	3.75	3.84	3.84	102	102	70.0-152			0.00432	25
Bromodichloromethane	3.75	3.58	3.50	95.4	93.4	70.0-130			2.10	25
cis-1,3-Dichloropropene	3.75	3.61	3.59	96.3	95.7	70.0-130			0.601	25
4-Methyl-2-pentanone (MIBK)	3.75	3.31	3.30	88.4	88.0	70.0-142			0.392	25
Toluene	3.75	3.64	3.60	97.0	96.1	70.0-130			0.922	25
trans-1,3-Dichloropropene	3.75	3.66	3.63	97.6	96.7	70.0-130			0.910	25
1,1,2-Trichloroethane	3.75	3.64	3.61	97.1	96.2	70.0-130			0.925	25
Tetrachloroethylene	3.75	3.71	3.66	98.8	97.7	70.0-130			1.18	25
Methyl Butyl Ketone	3.75	3.46	3.44	92.2	91.8	70.0-150			0.419	25
Dibromochloromethane	3.75	3.78	3.74	101	99.7	70.0-130			0.959	25
1,2-Dibromoethane	3.75	3.67	3.68	97.8	98.2	70.0-130			0.403	25
Chlorobenzene	3.75	3.52	3.50	93.8	93.3	70.0-130			0.495	25

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

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

(LCS) R3309395-1 05/13/18 08:01 • (LCSD) R3309395-2 05/13/18 08:51

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Ethylbenzene	3.75	3.57	3.63	95.1	96.8	70.0-130			1.72	25
m&p-Xylene	7.50	7.02	7.09	93.7	94.6	70.0-130			0.981	25
o-Xylene	3.75	3.57	3.60	95.1	96.0	70.0-130			0.984	25
Styrene	3.75	3.69	3.75	98.4	100	70.0-130			1.78	25
Bromoform	3.75	3.88	3.90	103	104	70.0-130			0.587	25
1,1,2,2-Tetrachloroethane	3.75	3.56	3.57	94.8	95.1	70.0-130			0.328	25
4-Ethyltoluene	3.75	3.62	3.65	96.4	97.3	70.0-130			0.921	25
1,3,5-Trimethylbenzene	3.75	3.37	3.59	90.0	95.7	70.0-130			6.17	25
1,2,4-Trimethylbenzene	3.75	3.55	3.58	94.7	95.6	70.0-130			0.934	25
1,3-Dichlorobenzene	3.75	3.72	3.76	99.3	100	70.0-130			1.00	25
1,4-Dichlorobenzene	3.75	3.63	3.66	96.8	97.5	70.0-130			0.774	25
Benzyl Chloride	3.75	3.82	3.85	102	103	70.0-144			0.773	25
1,2-Dichlorobenzene	3.75	3.62	3.64	96.7	97.0	70.0-130			0.359	25
1,2,4-Trichlorobenzene	3.75	4.63	4.61	124	123	70.0-155			0.405	25
Hexachloro-1,3-butadiene	3.75	3.81	3.83	102	102	70.0-145			0.525	25
Naphthalene	3.75	4.41	4.36	118	116	70.0-155			1.06	25
Allyl Chloride	3.75	3.16	3.19	84.2	85.1	70.0-130			1.15	25
2-Chlorotoluene	3.75	3.53	3.59	94.2	95.6	70.0-130			1.52	25
Methyl Methacrylate	3.75	3.62	3.56	96.5	94.9	70.0-130			1.59	25
Tetrahydrofuran	3.75	3.14	3.16	83.8	84.2	70.0-140			0.402	25
2,2,4-Trimethylpentane	3.75	3.30	3.32	88.0	88.4	70.0-130			0.441	25
Vinyl Bromide	3.75	3.67	3.70	97.8	98.7	70.0-130			0.972	25
Isopropylbenzene	3.75	3.60	3.63	95.9	96.7	70.0-130			0.829	25
1,1-Difluoroethane	3.75	3.41	3.45	91.0	92.1	70.0-130			1.26	25
(S) 1,4-Bromofluorobenzene				98.5	99.8	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3309779-3 05/14/18 09:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Ethylbenzene	U		0.0506	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
(S) 1,4-Bromofluorobenzene	98.4			60.0-140

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

(LCS) R3309779-1 05/14/18 07:37 • (LCSD) R3309779-2 05/14/18 08:22

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethylbenzene	3.75	4.26	4.32	114	115	70.0-130			1.35	25
m&p-Xylene	7.50	8.39	8.51	112	113	70.0-130			1.40	25
o-Xylene	3.75	4.24	4.29	113	114	70.0-130			1.25	25
(S) 1,4-Bromofluorobenzene				101	100	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3309735-3 05/14/18 09:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Propene	0.153	⌋	0.0932	0.400
Toluene	0.0653	⌋	0.0499	0.200
m&p-Xylene	0.111	⌋	0.0946	0.400
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	92.9			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3309735-1 05/14/18 08:17 • (LCSD) R3309735-2 05/14/18 09:01

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	2.71	2.61	72.3	69.6	52.0-158			3.91	25
Propene	3.75	4.37	4.50	117	120	54.0-155			2.84	25
Toluene	3.75	4.30	4.26	115	114	70.0-130			0.811	25
m&p-Xylene	7.50	8.92	8.76	119	117	70.0-130			1.80	25
(S) 1,4-Bromofluorobenzene				100	98.5	60.0-140				



Method Blank (MB)

(MB) R3309986-3 05/15/18 10:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Ethylbenzene	U		0.0506	0.200
m&p-Xylene	0.0963	J	0.0946	0.400
o-Xylene	U		0.0633	0.200
(S) 1,4-Bromofluorobenzene	94.3			60.0-140

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

(LCS) R3309986-1 05/15/18 08:30 • (LCSD) R3309986-2 05/15/18 09:14

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethylbenzene	3.75	4.38	4.43	117	118	70.0-130			1.30	25
m&p-Xylene	7.50	9.05	8.90	121	119	70.0-130			1.67	25
o-Xylene	3.75	4.47	4.36	119	116	70.0-130			2.55	25
(S) 1,4-Bromofluorobenzene				100	97.8	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3310613-3 05/16/18 09:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Propene	0.166	⬇	0.0932	0.400
(S) 1,4-Bromofluorobenzene	94.1			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3310613-1 05/16/18 08:31 • (LCSD) R3310613-2 05/16/18 09:14

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Propene	3.75	4.76	4.69	127	125	54.0-155			1.53	25
(S) 1,4-Bromofluorobenzene				99.0	97.4	60.0-140				



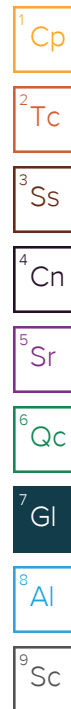
Guide to Reading and Understanding Your Laboratory Report

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.

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.
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.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.





ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* 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 ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
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	TN2000002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

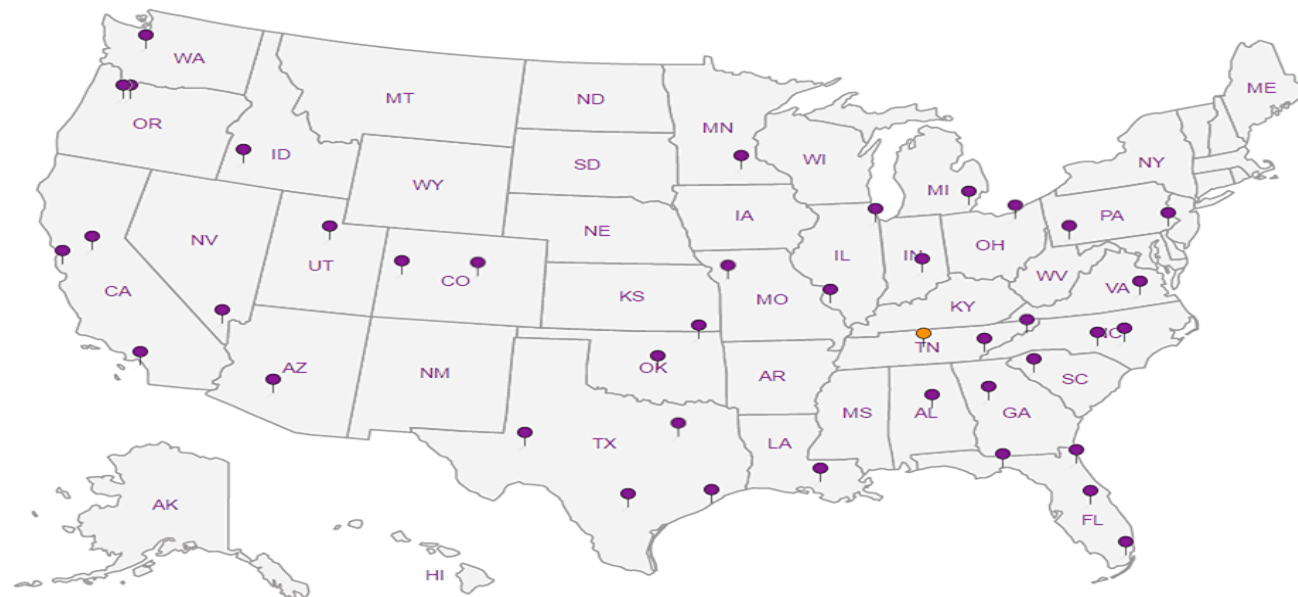
Third Party Federal Accreditations

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

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



Partner, Engineering
and Science (PES)

Billing Information:

2154 Torrance
Blvd, Torrance,
CA 90501

Pres
Cnk

Analysis / Container / Preservative

Chain of Custody Page 1 of 2



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Report to:
Nate Maroon

Email To: nmaroon@partneresi.com

Project Description: 1605 Industrial Avenue

City/State Collected: San Jose, CA

Phone: (510) 410-1009
Fax:

Client Project #
18-211700.2

Lab Project #

Collected by (print):
N. Maroon

Site/Facility ID #

P.O. #

Collected by (signature):

Njm

Rush? (Lab MUST Be Notified)

Same Day ☒ Five Day
Next Day ☐ 5 Day (Rad Only)
Two Day ☐ 10 Day (Rad Only)
Three Day ☐

Quote #

Date Results Needed

Immediately
Packed on Ice N ☒ Y ☐

No.
of
Cnrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	
B1-SG-2		Air	2	5/8/18	830	X
B1-SG-8			8		845	X
B2-SG-2			2		900	X
B2-SG-8			8		915	X
B3-SG-2			2		930	X
B3-SG-8			8		945	X
B4-SG-2			2		1000	X
B4-SG-8			8		1030	X
B5-SG-2			2		1045	X
B5-SG-8			8		1130	X

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks:

B6-SG-2 #6249 1200
B6-SG-8 #8863 1230

Samples returned via:

UPS ☒ FedEx ☐ Courier ☐

Tracking # 41918 3258 4475

pH _____ Temp _____

Flow _____ Other _____

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
If Applicable
VDA Zero Headspace: ☐ Y ☐ N
Preservation Correct/Checked: ☐ Y ☐ N

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Trip Blank Received: Yes / No
HCL / MeOH
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: *AmP* °C
Bottles Received: *24*

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: *5/11/18* Time: *845*

Hold:

Condition:
NCF / ☒ OK

PES		Billing Information:		Analysis / Container / Preservative										Chain of Custody Page <u>2</u> of <u>2</u>			
		12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859										L# <u>L993398</u>					
Report to:		Email To:		VOCs TO-15										Table #			
Project Description: <u>1605 Industrial Avenue</u>		City/State Collected:												Lab Project #		Acctnum: <u>PARENGCA</u>	
Phone: _____ Fax: _____		Client Project # <u>18-211700.2</u>												P.O. #		Template:	
Collected by (print):		Site/Facility ID #												Quote #		Prelog/n:	
Collected by (signature):		Rush? (Lab MUST Be Notified) ☐ Same Day ☒ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day												Date Results Needed		TSR: <u>Brian Ford</u>	
Immediately Packed on Ice: N ☐ Y ☐		No. of Cntrs		PB: <u>JB 5-3-18</u>		Shipped Via: <u>Saver</u>											
Sample ID		Comp/Grab		Matrix *		Depth		Date		Time		Remarks		Sample # (lab only)			
B7-SG-2				Air		2'		5/8/18		130		X		-13 6552			
B7-SG-8				↓		8'		↓		150		X		14 8904			
B8-SG-2				↓		2		↓		230		X		15 5196			
B8-SG-8				↓		8		↓		300		X		16 8866			
B9-SG-2				↓		2		5/9/18		900		X		17 6156			
B9-SG-8				↓		8		↓		930		X		18 8817			
B10-SG-2				↓		2		↓		1000		X		14 5597			
B10-SG-8				↓		8		↓		1030		X		20 6057			
B11-SG-2				↓		2		↓		1100		X		21 5338			
B11-SG-8				↓		8		↓		1130		X		22 5163			
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks: <u>B12-SG-2</u> # <u>7203</u> 1200 <u>B12-SG-8</u> # <u>5286</u> 1230		X -23 X -24		pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist: COC Seal Present/Intact: <u>NP</u> <u>Y</u> <u>N</u> COC Signed/Accurate: <u>Y</u> <u>N</u> Bottles arrive intact: <u>Y</u> <u>N</u> Correct bottles used: <u>Y</u> <u>N</u> Sufficient volume sent: <u>Y</u> <u>N</u> If Applicable: VOA Zero Headspace: <u>Y</u> <u>N</u> Preservation Correct/Checked: <u>Y</u> <u>N</u>									
Samples returned via: ☐ UPS ☐ FedEx ☐ Courier		Tracking #		Relinquished by: (Signature) <u>[Signature]</u> Date: <u>5/10/18</u> Time: <u>1000</u>										Received by: (Signature) _____ Trip Blank Received: Yes / No HCL / MeOH TBR			
Relinquished by: (Signature) _____		Date: _____		Time: _____		Received by: (Signature) _____		Temp: <u>AMB</u> °C Bottles Received: <u>24</u>		If preservation required by Login: Date/Time							
Relinquished by: (Signature) _____		Date: _____		Time: _____		Received for lab by: (Signature) <u>[Signature]</u>		Date: <u>5/11/18</u> Time: <u>845</u>		Hold:		Condition: NCF / OK					