



November 9, 2022

Mr. Reinbill Maniquez, CHMM  
Senior Project Manager  
GZA GeoEnvironmental of New York  
104 West 29<sup>th</sup> Street, 10<sup>th</sup> Floor  
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Dear Mr. Maniquez:

Enclosed is the Data Usability Summary Report for the organic analyses of the air and soil vapor samples collected on October 20, 21, and 22, 2021; and August 18, 2022, for the 150<sup>th</sup> Street, Bronx, New York Project. Based upon this quality assurance review, the principal areas of concern are out-of-control initial and continuing calibration verification recoveries, out-of-control laboratory control sample recoveries, results above the instrument calibration range, and qualitative identification issues.

If you have any questions or comments, or if we can be of any further assistance, please feel free to call.

Sincerely,

Jacob A. Butler  
Quality Assurance Chemist

Sincerely,

Rock J. Vitale, CEAC  
Technical Director of Chemistry/  
Principal

JAB/RJV:nd



Setting the Standards for Innovative Environmental Solutions

**DATA USABILITY SUMMARY REPORT FOR  
150<sup>TH</sup> STREET, BRONX, NEW YORK PROJECT NEW YORK  
SAMPLES COLLECTED ON OCTOBER 20, 21, and 22, 2021;  
AND AUGUST 18, 2022  
SAMPLE DELIVERY GROUPS: L2244833, GCJ63027, GCJ61984, AND GCJ63992**

November 9, 2022

Prepared for:

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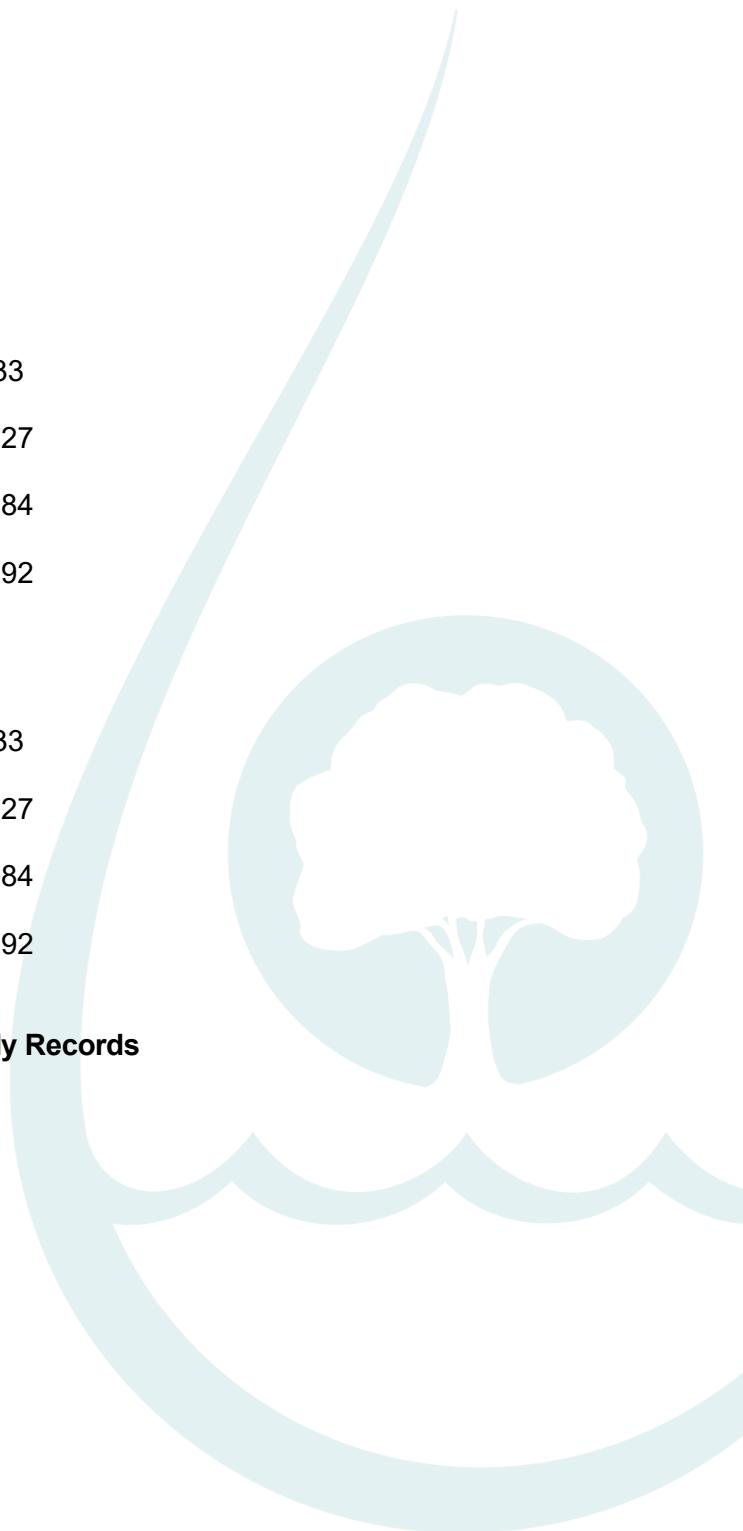
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## **Introduction**

This Data Usability Summary Report (DUSR) is based upon an examination of the data generated from the analyses of the air and soil vapor samples collected on October 20, 21, and 22, 2021; and August 18, 2022, for the 150<sup>th</sup> Street, Bronx, New York Project. This DUSR is applicable to the samples collected by GZA Consulting, Inc. (GZA), as detailed on Table 1. Table 1 also presents the laboratory sample number(s), collection date, matrix, review level, and the parameter(s) examined for each sample.

This quality assurance (QA) review has been performed with guidance from the “National Functional Guidelines for Superfund Organic Methods Data Review,” US EPA 540-R-2016-002, September 2016; “Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),” New York State Department of Environmental Conservation (NYSDEC), January 2021; and “Final DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B - Guidance for Data Deliverables and the Development of Data Usability Summary Reports,” NYSDEC, May 2010. The data validation included the review of raw data (Level 4 only) and associated quality control (QC) summary forms for compliance with the applicable methods and for data usability with respect to the appropriate guidance documents. These documents have been used to aid the data reviewer in the interpretation of the QC analysis results and in the overall evaluation of the sample data deliverables.

The reported analytical results are presented in Section 2; any required data validation qualifications are presented on the qualified data tables in Section 2. Data were examined to determine the usability of the analytical results and compliance relative to the requirements specified in the methodology(ies). In addition, the deliverables were evaluated for completeness and accuracy. Qualifier codes have been placed next to results to enable the data user to quickly assess the qualitative and/or quantitative reliability of any result based on the criteria evaluated. The data qualifications allow the data end-user to best understand the usability of any result. Data not qualified in this report should be considered valid based on the QC criteria that have been reviewed. Details of this QA review are presented in Section 1 of this report.

**TABLE 1**  
**SAMPLES INCLUDED IN THIS QUALITY ASSURANCE REVIEW**

Field Sample Name	Laboratory Sample Number	Laboratory Sample Delivery Group	Date of Sample Collection	Matrix	Parameter Examined
SV-17	L2244833-01	L2244833	8/18/22	SV	TO-15
SV-24	L2244833-02	L2244833	8/18/22	SV	TO-15
SV-25	L2244833-03	L2244833	8/18/22	SV	TO-15
SV-18	L2244833-04	L2244833	8/18/22	SV	TO-15
SV-19	L2244833-05	L2244833	8/18/22	SV	TO-15
SV-28	L2244833-06	L2244833	8/18/22	SV	TO-15
AA-03	L2244833-07	L2244833	8/18/22	Air	TO-15
IA-3	CJ63027	GCJ63027	10/21/21	Air	TO-15
SV-4	CJ63028	GCJ63027	10/21/21	SV	TO-15
SV-5	CJ63029	GCJ63027	10/21/21	SV	TO-15
IA-2	CJ63030	GCJ63027	10/21/21	Air	TO-15
SV-6	CJ63031	GCJ63027	10/21/21	SV	TO-15
IA-1	CJ61984	GCJ61984	10/20/21	Air	TO-15
OA-1	CJ61985	GCJ61984	10/20/21	Air	TO-15
SV-1	CJ63992	GCJ63992	10/22/21	SV	TO-15
SV-2	CJ63993	GCJ63992	10/22/21	SV	TO-15
SV-3	CJ63994	GCJ63992	10/21/21	SV	TO-15

NOTES:

TO-15 - Volatile Organic Compounds (VOCs) by US EPA Method TO-15. (17 Level 4 analyses)  
 SV - Soil Vapor.

## Section 1 Quality Assurance Review

### A. Organic Data

The analyses of 17 air and soil vapor samples collected for the 150<sup>th</sup> Street, Bronx, New York Project in New York, were performed by Alpha Analytical (Alpha) in Westborough, Massachusetts, and Phoenix Environmental Laboratories, Inc. (Phoenix), in Manchester, Connecticut. The samples were collectively analyzed for volatile organic compounds by US EPA Method TO-15. The specific samples and analyses reviewed are identified on Table 1.

The findings in this report are based upon a review of data package completeness, sample preservation and holding times, calibration information, blank analysis results, surrogate recoveries, laboratory control sample (LCS) results, internal standard responses, and results reporting. Any required data validation qualifications are presented on the qualified data tables in Section 2.

Based upon the review of the data package provided, the following issues and qualifiers are offered. Data usability issues represent an interpretation of the QC results obtained for the project samples. Quite often, data qualifications address issues relating to sample matrix problems. Similarly, the data validation guidelines routinely specify areas of the data that require qualification, yet the methods used for analysis may not require corrective action by the laboratory. Accordingly, the following issues should not be construed as an indication of laboratory performance.

### Data Package Completeness Evaluation

- The data packages were found to be complete and provided sufficient information to perform the requested validation, with the following exceptions.
- In Sample Delivery Groups (SDGs) GCJ61984 and GCJ63027, the summary forms for the laboratory duplicate evaluation were not provided in the data package. However, the results were present on the QA/QC summary forms located at the beginning of the data packages and the results were able to be evaluated.
- In SDGs GCJ63027 and GCJ63992, formal Chain-of-Custody (COC) Records were not provided with the data packages. The laboratory-generated Canister Sampling Information forms were utilized to verify the sample identifications (IDs) and collection dates and times used throughout the data packages.
- In SDG GCJ63992, the Canister Sampling Information form lists the collection date for sample SV-3 as 10/21/21. However, the collection date is listed as 10/22/21 throughout the package and EDD; the data reviewer utilized the collection date of 10/22/21, as this date aligns with the collection dates of the other samples in the SDG.
- In SDGs GCJ63027 and GCJ63992, the initial calibration for the instrument CHEM20 included a quadratic curve for both 1,2,4-trichlorobenzene and 1,2,4-trichlorobenzene(SIM). However, the initial calibration summary form did not include the values for the curve and instead only included the Coefficient of Determination ( $R^2$ ) value. The data reviewer determined that a request to the laboratory to obtain the curve was not warranted because

the values for 1,2,4-trichlorobenzene were all “not-detected” in these SDGs, and the R<sup>2</sup> value was ≥ 0.99 for both the full scan and selected ion monitoring (SIM) calibration.

#### Sample Holding Time Evaluation

- All sample analyses were performed within the required holding times; qualification of data was not warranted.

#### Sample Condition Upon Receipt Evaluation

- All samples were received in good condition; qualification of data was not warranted.

#### Instrument Performance Check Evaluation

- The instrument performance check results were evaluated against the method acceptance limits. All instrument performance check results were observed to be within the method acceptance limits; qualification of data was not warranted.

#### Initial Calibration Evaluation

- The initial calibrations were evaluated against the method acceptance limits. All initial calibrations were observed to be within the method acceptance limits; qualification of data was not warranted.

#### Initial and Continuing Calibration Verification Evaluation

- The initial and continuing calibration verifications were evaluated against the method acceptance limits. All initial and continuing calibration verifications were observed to be within the method acceptance limits with the following exceptions.
  - The reported method detection limits (MDLs) and reporting detection limits (RDLs) for 1,2,4-trichlorobenzene in all samples in SDG L2244833 may be higher than reported, and the “not-detected” results have been flagged “UJ” on the data tables. An out-of-criteria percent difference (%D), coupled with a sensitivity decrease, was observed for the initial calibration verification associated with these samples.
  - The reported positive results for ethanol in SDG GCJ63027 sample IA-2 and all samples in SDG GCJ63992 should be considered estimated and have been flagged “J” on the data tables. An out-of-criteria %D, coupled with a sensitivity increase, was observed for the continuing calibration verification associated with these samples.

#### Method Blank Evaluation

- The method blanks were found to be free of contamination and qualification was not warranted.

### Surrogate Evaluation

- The surrogate recoveries were evaluated against the laboratory acceptance limits; qualification of data due to surrogate recovery was not warranted.

### Laboratory Control Sample Evaluation

- The LCS was evaluated against the laboratory acceptance limits. All LCS results were observed to be within the laboratory acceptance limits with the following exception.
- The reported positive results for isopropylalcohol in all samples in SDG GCJ61984 should be considered estimated biased high and have been flagged "J+" on the data tables. A high recovery (> laboratory acceptance limit) was observed in the associated LCS analysis.

### Internal Standard Evaluation

- The internal standard responses were evaluated against the method acceptance limits. All internal standard responses were observed to be within the method acceptance limits; qualification of data was not warranted.

### Laboratory Duplicate Evaluation

- The laboratory duplicate results were evaluated against the method acceptance limits. Acceptable precision and sample representativeness (the relative percent difference [RPD] between results was  $\leq 25\%$  when both results were  $\geq 5\times$  the RDL, or when at least one result was  $< 5\times$  the RDL, the difference was  $\leq$  the RDL) were demonstrated by the reported results in the laboratory duplicate pair. Qualification of data was not warranted.
- In SDG L2244833, a laboratory duplicate was analyzed with the QC batch that included all of the samples within SDG L2244833. However, a summary form was not provided for this laboratory duplicate. The laboratory was not contacted for a revision because the parent sample of the laboratory duplicate was from a separate SDG; based on the nature of many organic compounds, any data qualification based on matrix QC is applied only to the parent sample. Therefore, the duplicate results would not lead to qualification of the data.

### Results Reporting

- The reported positive results for ethanol in SDG GCJ61984 sample IA-1 and SDG GCJ63027 samples IA-3, SV-5, and IA-2 should be considered estimated and have been flagged "J" on the data tables. The reported results for ethanol in these samples exceeded the instrument calibration range.
- The reported positive results for the analytes listed on the table below should be considered tentatively identified and have been flagged "N" on the data tables. The ratio of the mass-charge ions was significantly different than expected.

<u>Samples</u>	<u>SDG</u>	<u>Compound(s) with Tentatively Identified Results ("N")</u>
IA-3 and IA-2	GCJ63027	heptane
SV-4	GCJ63027	1,4-dichlorobenzene
SV-4, SV-5, IA-2, and SV-6	GCJ63027	1,3-butadiene
SV-5	GCJ63027	isopropylalcohol
IA-2	GCJ63027	<i>n</i> -Butylbenzene
SV-6	GCJ63027	4-ethyltoluene
OA-1	GCJ61984	hexane
SV-1	GCJ63992	benzyl chloride
SV-3	GCJ63992	isopropylalcohol
SV-17	L2244833	acetone and <i>tert</i> -butyl alcohol
SV-24 and SV-25	L2244833	1,3-butadiene
SV-17, SV-24, and SV-25	L2244833	carbon disulfide
SV-25	L2244833	ethyl acetate
SV-28, SV-17, SV-24, and SV-25	L2244833	hexane

Complete support documentation for this organic QA review is presented in Section 3 of this report. The cover sheet for this section is a checklist of all QA procedures required by the protocol and examined in this QA review.

### C. Conclusions

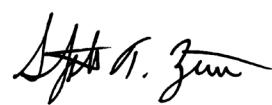
Based upon this QA review, the principal areas of concern are out-of-control initial and continuing calibration verification recoveries, out-of-control LCS recoveries, results above the instrument calibration range, and qualitative identification issues. To confidently use any of the analytical data within this sample set, the data user should understand the limitations of the results. The Case Narratives and Chain-of-Custody Records are provided in Section 5.

Report Prepared by,



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**SECTION 2**  
**ANALYTICAL RESULTS**

**DATA QUALIFIER NOTES**

- U The laboratory reported this analyte as “not-detected” or this analyte was detected in a laboratory, field, and/or equipment blank at a similar level and should be considered “not-detected.”
- J Quantitation is approximate with no direction of bias due to limitations identified during data validation.
- J+ Quantitation is approximate and may be biased high due to limitations identified during data validation.
- J- Quantitation is approximate and may be biased low due to limitations identified during data validation.
- R Unusable result; analyte may or may not be present in sample.
- UJ This analyte was not detected, but the detection limit may or may not be higher due to a bias identified during data validation.
- N This analyte's identification should be considered tentative due to limitations identified during the quality assurance review.

**A. SAMPLE DELIVERY GROUP L2244833**

#sys_sample_	lab_matrix_	dilution_f	code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name	result_value	result_typ	reportable	detect_fl	lab_qualifi	validator_q	Interpreted_q	validated_y	method_detecti	reporting_detecti	detection_limit	validation_le
SV-17	DILUTION2	AV	166.7	L2244833-01	71-55-6	1,1,1-TRICHLOROETHANE	35500	TRG	Yes	Y	ers	E			n	Y	45.6	182	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	71-55-6	1,1,1-TRICHLOROETHANE	35100	TRG	No	Y	E			E	n	Y	5.67	22.6	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	79-34-5	1,1,2,2-TETRACHLOROETHANE		TRG	Yes	N	U			U	n	Y	8.72	28.5	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	79-00-5	1,1,2-TRICHLOROETHANE		TRG	Yes	N	U			U	n	Y	7.58	22.6	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	75-34-3	1,1-DICHLOROETHANE	8010	TRG	Yes	Y					n	Y	5.26	16.8	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	75-35-4	1,1-DICHLOROETHENE	2590	TRG	Yes	Y					n	Y	5.27	16.5	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	120-82-1	1,2,4-TRICHLOROBENZENE		TRG	Yes	N	U	UJ	UJ		n	Y	10.4	30.8	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	95-63-6	1,2,4-TRIMETHYLBENZENE		TRG	Yes	N	U			U	n	Y	3.76	20.4	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	106-93-4	1,2-DIBROMOETHANE		TRG	Yes	N	U			U	n	Y	8.91	31.9	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	95-50-1	1,2-DICHLOROBENZENE		TRG	Yes	N	U			U	n	Y	7.82	25	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	107-06-2	1,2-DICHLOROETHANE		TRG	Yes	N	U			U	n	Y	5.06	16.8	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	78-87-5	1,2-DICHLOROPROPANE		TRG	Yes	N	U			U	n	Y	5.87	19.2	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	108-67-8	1,3,5-TRIMETHYLBENZENE		TRG	Yes	N	U			U	n	Y	6.88	20.4	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	106-99-0	1,3-BUTADIENE		TRG	Yes	N	U			U	n	Y	3.08	9.18	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	541-73-1	1,3-DICHLOROBENZENE		TRG	Yes	N	U			U	n	Y	7.82	25	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	106-46-7	1,4-DICHLOROBENZENE		TRG	Yes	N	U			U	n	Y	7.94	25	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	123-91-1	1,4-DIOXANE		TRG	Yes	N	U			U	n	Y	6.02	15	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	540-84-1	2,2,4-TRIMETHYLPENTANE		TRG	Yes	N	U			U	n	Y	3.5	19.4	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	78-93-3	2-BUTANONE	52.2	TRG	Yes	Y					n	Y	2.95	30.7	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	591-78-6	2-HEXANONE		TRG	Yes	N	U			U	n	Y	5.49	17	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	107-05-1	3-CHLOROPROPENE		TRG	Yes	N	U			U	n	Y	3.79	13	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	622-96-8	4-ETHYLTOLUENE		TRG	Yes	N	U			U	n	Y	3.78	20.4	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	108-10-1	4-METHYL-2-PENTANONE		TRG	Yes	N	U			U	n	Y	3.58	42.6	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	67-64-1	ACETONE	290	TRG	Yes	Y			N	N	n	Y	34	49.4	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	71-43-2	BENZENE	14.2	TRG	Yes	Y					n	Y	3.23	13.3	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	100-44-7	BENZYL CHLORIDE		TRG	Yes	N	U			U	n	Y	5.18	21.5	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	75-27-4	BROMODICHLOROMETHANE		TRG	Yes	N	U			U	n	Y	7.03	27.8	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	75-25-2	BROMOFORM		TRG	Yes	N	U			U	n	Y	13.8	42.9	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	74-83-9	BROMOMETHANE		TRG	Yes	N	U			U	n	Y	6.21	16.1	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	75-15-0	CARBON DISULFIDE	15.4	TRG	Yes	Y			N	N	n	Y	3.61	12.9	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	56-23-5	CARBON TETRACHLORIDE		TRG	Yes	N	U			U	n	Y	6.54	26.1	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	108-90-7	CHLOROBENZENE		TRG	Yes	N	U			U	n	Y	5.99	19.1	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	75-00-3	CHLOROETHANE		TRG	Yes	N	U			U	n	Y	4.41	11	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	67-66-3	CHLOROFORM	385	TRG	Yes	Y					n	Y	6.4	20.3	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	74-87-3	CHLOROMETHANE		TRG	Yes	N	U			U	n	Y	2.95	8.57	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	110-82-7	CYCLOHEXANE	17.6	TRG	Yes	Y					n	Y	2.63	14.3	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	124-48-1	DIBROMOCHLOROMETHANE		TRG	Yes	N	U			U	n	Y	10.8	35.4	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	75-71-8	DICHLORODIFLUOROMETHANE		TRG	Yes	N	U			U	n	Y	5.98	20.5	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	64-17-5	ETHYL ALCOHOL		TRG	Yes	N	U			U	n	Y	28.6	196	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	141-78-6	ETHYL ACETATE		TRG	Yes	N	U			U	n	Y	9.12	37.5	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	100-41-4	ETHYL BENZENE		TRG	Yes	N	U			U	n	Y	3.9	18	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		TRG	Yes	N	U			U	n	Y	10.4	31.8	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	76-14-2	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE		TRG	Yes	N	U			U	n	Y	8.6	29	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	142-82-5	HEPTANE	138	TRG	Yes	Y					n	Y	4	17	ug/m3		

#sys_sample_	lab_matrix_	dilution_f	code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name	result_value	result_typ	reportable	detect_fl	lab_qualifi	validator_q	Interpreted_q	validated_y	method_detecti	reporting_detecti	detection_limit	validation_le
SV-17	DILUTION1	AV	20.76	L2244833-01	593-60-2	VINYL BROMIDE					TRG	Yes	N	U		U	Y	6.51	18.1	ug/m3	4
SV-17	DILUTION1	AV	20.76	L2244833-01	75-01-4	VINYL CHLORIDE				5590	TRG	Yes	N	U		U	Y	3.32	10.6	ug/m3	4
SV-17	DILUTION1	AV	20.76	L2244833-01	156-59-2	CIS-1,2-DICHLOROETHENE					TRG	Yes	Y			Y	9.63	16.5	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	10061-01-5	CIS-1,3-DICHLOROPROPENE					TRG	Yes	N	U		U	Y	3.85	18.8	ug/m3	4
SV-17	DILUTION1	AV	20.76	L2244833-01	110-54-3	N-HEXANE				308	TRG	Yes	Y		N	N	Y	2.66	14.6	ug/m3	4
SV-17	DILUTION1	AV	20.76	L2244833-01	95-47-6	O-XYLENE					TRG	Yes	N	U		U	Y	4.08	18	ug/m3	4
SV-17	DILUTION1	AV	20.76	L2244833-01	179601-23-1	P/M-XYLENE					TRG	Yes	N	U		U	Y	8.21	36.1	ug/m3	4
SV-17	DILUTION1	AV	20.76	L2244833-01	156-60-5	TRANS-1,2-DICHLOROETHENE				100	TRG	Yes	Y			Y	5.27	16.5	ug/m3	4	
SV-17	DILUTION1	AV	20.76	L2244833-01	10061-02-6	TRANS-1,3-DICHLOROPROPENE					TRG	Yes	N	U		U	Y	4.11	18.8	ug/m3	4
SV-24	DILUTION1	AV	10	L2244833-02	71-55-6	1,1,1-TRICHLOROETHANE				3160	TRG	Yes	Y			Y	2.73	10.9	ug/m3	4	
SV-24	INITIAL	AV	1	L2244833-02	71-55-6	1,1,1-TRICHLOROETHANE				2460	TRG	No	Y	E		E	N	0.273	1.09	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	79-34-5	1,1,2,2-TETRACHLOROETHANE					TRG	Yes	N	U		U	Y	0.422	1.37	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	79-00-5	1,1,2-TRICHLOROETHANE					TRG	Yes	N	U		U	Y	0.366	1.09	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	75-34-3	1,1-DICHLOROETHANE				23.5	TRG	Yes	Y			Y	0.254	0.809	ug/m3	4	
SV-24	INITIAL	AV	1	L2244833-02	75-35-4	1,1-DICHLOROETHENE				2.31	TRG	Yes	Y			Y	0.255	0.793	ug/m3	4	
SV-24	INITIAL	AV	1	L2244833-02	120-82-1	1,2,4-TRICHLOROBENZENE					TRG	Yes	N	U	UJ	UJ	Y	0.5	1.48	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	95-63-6	1,2,4-TRIMETHYLBENZENE				5.9	TRG	Yes	Y			Y	0.181	0.983	ug/m3	4	
SV-24	INITIAL	AV	1	L2244833-02	106-93-4	1,2-DIBROMOETHANE					TRG	Yes	N	U		U	Y	0.431	1.54	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	95-50-1	1,2-DICHLOROBENZENE					TRG	Yes	N	U		U	Y	0.378	1.2	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	107-06-2	1,2-DICHLOROETHANE					TRG	Yes	N	U		U	Y	0.244	0.809	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	78-87-5	1,2-DICHLOROPROPANE					TRG	Yes	N	U		U	Y	0.282	0.924	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	108-67-8	1,3,5-TRIMETHYLBENZENE				1.59	TRG	Yes	Y			Y	0.332	0.983	ug/m3	4	
SV-24	INITIAL	AV	1	L2244833-02	106-99-0	1,3-BUTADIENE				8.03	TRG	Yes	Y		N	N	Y	0.148	0.442	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	541-73-1	1,3-DICHLOROBENZENE					TRG	Yes	N	U		U	Y	0.377	1.2	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	106-46-7	1,4-DICHLOROBENZENE					TRG	Yes	N	U		U	Y	0.382	1.2	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	123-91-1	1,4-DIOXANE					TRG	Yes	N	U		U	Y	0.29	0.721	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	540-84-1	2,2,4-TRIMETHYL PENTANE					TRG	Yes	N	U		U	Y	0.169	0.934	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	78-93-3	2-BUTANONE				106	TRG	Yes	Y				Y	0.142	1.47	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	591-78-6	2-HEXANONE				13.4	TRG	Yes	Y		N	N	Y	0.266	0.82	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	107-05-1	3-CHLOROPROPENE					TRG	Yes	N	U		U	Y	0.183	0.626	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	622-96-8	4-ETHYL TOLUENE				1.12	TRG	Yes	Y				Y	0.182	0.983	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	108-10-1	4-METHYL-2-PENTANONE					TRG	Yes	N	U		U	Y	0.173	2.05	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	67-64-1	ACETONE				242	TRG	Yes	Y				Y	1.64	2.38	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	71-43-2	BENZENE				11.2	TRG	Yes	Y				Y	0.156	0.639	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	100-44-7	BENZYL CHLORIDE					TRG	Yes	N	U		U	Y	0.25	1.04	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	75-27-4	BROMODICHLOROMETHANE					TRG	Yes	N	U		U	Y	0.338	1.34	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	75-25-2	BROMOFORM					TRG	Yes	N	U		U	Y	0.663	2.07	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	74-83-9	BROMOMETHANE					TRG	Yes	N	U		U	Y	0.3	0.777	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	75-15-0	CARBON DISULFIDE				10.5	TRG	Yes	Y		N	N	Y	0.174	0.623	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	56-23-5	CARBON TETRA CHLORIDE					TRG	Yes	N	U		U	Y	0.314	1.26	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	108-90-7	CHLOROBENZENE					TRG	Yes	N	U		U	Y	0.287	0.921	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	75-00-3	CHLOROETHANE					TRG	Yes	N	U		U	Y	0.212	0.528	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	67-66-3	CHLOROFORM				1.7	TRG	Yes	Y				Y	0.309	0.977	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	74-87-3	CHLOROMETHANE					TRG	Yes	N	U		U	Y	0.142	0.413	ug/m3	

#sys_sample_	lab_matrix_	dilution_f	code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name	result_value	result_typ	reportable	detect_fl	lab_qualifi	validator_q	Interpreted_q	validated_y	method_detecti	reporting_detecti	detection_limit	validation_le
			code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name		e_code	_result	ag	ers	ualifiers	ualifiers	n	on_limit	on_limit	_unit	vel
SV-24	INITIAL	AV	1	L2244833-02	75-09-2	METHYLENE CHLORIDE				0.928	TRG	Yes	N	U			Y	0.466	1.74	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	100-42-5	STYRENE				67.6	TRG	Yes	Y				Y	0.185	0.852	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	75-65-0	TERT-BUTYL ALCOHOL				138	TRG	Yes	Y				Y	0.141	1.52	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	127-18-4	TETRACHLOROETHENE					TRG	Yes	N	U		U	Y	0.444	1.36	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	109-99-9	TETRAHYDROFURAN					TRG	Yes	Y				Y	0.168	1.47	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	108-88-3	TOLUENE				15.8	TRG	Yes	Y				Y	0.196	0.754	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	79-01-6	TRICHLOROETHENE				12.9	TRG	Yes	Y				Y	0.271	1.07	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	75-69-4	TRICHLOROFLUOROMETHANE				3.87	TRG	Yes	Y				Y	0.386	1.12	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	593-60-2	VINYL BROMIDE					TRG	Yes	N	U		U	Y	0.313	0.874	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	75-01-4	VINYL CHLORIDE					TRG	Yes	N	U		U	Y	0.16	0.511	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	156-59-2	CIS-1,2-DICHLOROETHENE				23.7	TRG	Yes	Y				Y	0.464	0.793	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	10061-01-5	CIS-1,3-DICHLOROPROPENE					TRG	Yes	N	U		U	Y	0.186	0.908	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	110-54-3	N-HEXANE				166	TRG	Yes	Y		N	N	Y	0.128	0.705	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	95-47-6	O-XYLENE				3.75	TRG	Yes	Y				Y	0.197	0.869	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	179601-23-1	P/M-XYLENE				9.38	TRG	Yes	Y				Y	0.395	1.74	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	156-60-5	TRANS-1,2-DICHLOROETHENE					TRG	Yes	N	U		U	Y	0.255	0.793	ug/m3	4
SV-24	INITIAL	AV	1	L2244833-02	10061-02-6	TRANS-1,3-DICHLOROPROPENE					TRG	Yes	N	U		U	Y	0.198	0.908	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	71-55-6	1,1,1-TRICHLOROETHANE				2240	TRG	No	Y	E		E	N	0.567	2.27	ug/m3	4
SV-25	DILUTION2	AV	10.4	L2244833-03	71-55-6	1,1,1-TRICHLOROETHANE				2930	TRG	Yes	Y				Y	2.84	11.3	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	79-34-5	1,1,2,2-TETRACHLOROETHANE					TRG	Yes	N	U		U	Y	0.879	2.86	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	79-00-5	1,1,2-TRICHLOROETHANE					TRG	Yes	N	U		U	Y	0.758	2.27	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	75-34-3	1,1-DICHLOROETHANE				79.3	TRG	Yes	Y				Y	0.53	1.68	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	75-35-4	1,1-DICHLOROETHENE				5.63	TRG	Yes	Y				Y	0.531	1.65	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	120-82-1	1,2,4-TRICHLOROBENZENE					TRG	Yes	N	U	UJ	UJ	Y	1.04	3.09	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	95-63-6	1,2,4-TRIMETHYLBENZENE				6.1	TRG	Yes	Y				Y	0.376	2.05	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	106-93-4	1,2-DIBROMOETHANE					TRG	Yes	N	U		U	Y	0.899	3.2	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	95-50-1	1,2-DICHLOROBENZENE					TRG	Yes	N	U		U	Y	0.788	2.5	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	107-06-2	1,2-DICHLOROETHANE					TRG	Yes	N	U		U	Y	0.506	1.68	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	78-87-5	1,2-DICHLOROPROPANE					TRG	Yes	N	U		U	Y	0.587	1.92	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	108-67-8	1,3,5-TRIMETHYLBENZENE				2.67	TRG	Yes	Y				Y	0.688	2.05	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	106-99-0	1,3-BUTADIENE				1.67	TRG	Yes	Y		N	N	Y	0.308	0.92	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	541-73-1	1,3-DICHLOROBENZENE					TRG	Yes	N	U		U	Y	0.782	2.5	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	106-46-7	1,4-DICHLOROBENZENE					TRG	Yes	N	U		U	Y	0.794	2.5	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	123-91-1	1,4-DIOXANE					TRG	Yes	N	U		U	Y	0.602	1.5	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	540-84-1	2,2,4-TRIMETHYLPENTANE				4.25	TRG	Yes	Y				Y	0.351	1.94	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	78-93-3	2-BUTANONE				234	TRG	Yes	Y				Y	0.295	3.07	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	591-78-6	2-HEXANONE					TRG	Yes	N	U		U	Y	0.553	1.7	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	107-05-1	3-CHLOROPROPENE					TRG	Yes	N	U		U	Y	0.382	1.3	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	622-96-8	4-ETHYLTOLUENE					TRG	Yes	N	U		U	Y	0.379	2.05	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	108-10-1	4-METHYL-2-PENTANONE					TRG	Yes	N	U		U	Y	0.359	4.26	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	67-64-1	ACETONE				209	TRG	Yes	Y				Y	3.4	4.94	ug/m3	4
SV-25	DILUTION1	AV	2.08	L2244833-03	71-43-2	BENZENE				4.22	TRG	Yes									

#sys_sample_	lab_matrix_	dilution_f	code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name	result_value	result_typ	reportable	detect_fl	lab_qualifi	validator_q	Interpreted_q	validated_y	method_detecti	reporting_detecti	detection_limit	validation_le
			code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name	result_value	e_code	_result	ag	ers	ualifiers	ualifiers	n	on_limit	on_limit	_unit	vel
SV-25	DILUTION1	AV	2.08	L2244833-03	141-78-6	ETHYL ACETATE		4.43	TRG	Yes	Y			N	N	Y	0.915	3.75	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	100-41-4	ETHYLBENZENE		5	TRG	Yes	Y			U		Y	0.39	1.81	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE			TRG	Yes	N		U		U	Y	1.04	3.19	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	76-14-2	1,2-DICHLORO-1,1,2-TETRAFLUOROETHANE		3.52	TRG	Yes	Y					Y	0.86	2.91	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	142-82-5	HEPTANE		54.1	TRG	Yes	Y					Y	0.401	1.7	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	87-68-3	HEXACHLOROBUTADIENE			TRG	Yes	N		U		U	Y	1.17	4.44	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	67-63-0	ISO-PROPYL ALCOHOL		9.37	TRG	Yes	Y					Y	2.44	2.56	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	1634-04-4	METHYL TERT BUTYL ETHER			TRG	Yes	N		U		U	Y	0.393	1.5	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	75-09-2	METHYLENE CHLORIDE			TRG	Yes	N		U		U	Y	0.969	3.61	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	100-42-5	STYRENE			TRG	Yes	N		U		U	Y	0.384	1.77	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	75-65-0	TERT-BUTYL ALCOHOL		120	TRG	Yes	Y					Y	0.294	3.15	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	127-18-4	TETRACHLOROETHENE		128	TRG	Yes	Y					Y	0.922	2.82	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	109-99-9	TETRAHYDROFURAN			TRG	Yes	N		U		U	Y	0.348	3.07	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	108-88-3	TOLUENE		13.4	TRG	Yes	Y					Y	0.407	1.57	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	79-01-6	TRICHLOROETHENE		123	TRG	Yes	Y					Y	0.564	2.24	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	75-69-4	TRICHLOROFUROMETHANE			TRG	Yes	N		U		U	Y	0.804	2.34	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	593-60-2	VINYL BROMIDE			TRG	Yes	N		U		U	Y	0.651	1.82	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	75-01-4	VINYL CHLORIDE			TRG	Yes	N		U		U	Y	0.332	1.06	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	156-59-2	CIS-1,2-DICHLOROETHENE		1.88	TRG	Yes	Y					Y	0.963	1.65	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	10061-01-5	CIS-1,3-DICHLOROPROPENE			TRG	Yes	N		U		U	Y	0.386	1.89	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	110-54-3	N-HEXANE		279	TRG	Yes	Y			N	N	Y	0.267	1.47	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	95-47-6	O-XYLENE		8.43	TRG	Yes	Y					Y	0.409	1.81	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	179601-23-1	P/M-XYLENE		17.8	TRG	Yes	Y					Y	0.821	3.61	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	156-60-5	TRANS-1,2-DICHLOROETHENE			TRG	Yes	N		U		U	Y	0.531	1.65	ug/m3	4	
SV-25	DILUTION1	AV	2.08	L2244833-03	10061-02-6	TRANS-1,3-DICHLOROPROPENE			TRG	Yes	N		U		U	Y	0.412	1.89	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	71-55-6	1,1,1-TRICHLOROETHANE		16800	TRG	Yes	Y					Y	45.6	182	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	79-34-5	1,1,2,2-TETRACHLOROETHANE			TRG	Yes	N		U		U	Y	70	229	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	79-00-5	1,1,2-TRICHLOROETHANE			TRG	Yes	N		U		U	Y	61.1	182	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	75-34-3	1,1-DICHLOROETHANE		4650	TRG	Yes	Y					Y	42.5	135	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	75-35-4	1,1-DICHLOROETHENE		900	TRG	Yes	Y					Y	42.4	132	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	120-82-1	1,2,4-TRICHLOROBENZENE			TRG	Yes	N		U	UJ	UJ	Y	83.1	247	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	95-63-6	1,2,4-TRIMETHYLBENZENE			TRG	Yes	N		U		U	Y	30.1	164	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	106-93-4	1,2-DIBROMOETHANE			TRG	Yes	N		U		U	Y	71.9	256	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	95-50-1	1,2-DICHLOROBENZENE			TRG	Yes	N		U		U	Y	63.1	200	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	107-06-2	1,2-DICHLOROETHANE			TRG	Yes	N		U		U	Y	40.5	135	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	78-87-5	1,2-DICHLOROPROPANE			TRG	Yes	N		U		U	Y	47.1	154	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	108-67-8	1,3,5-TRIMETHYLBENZENE			TRG	Yes	N		U		U	Y	55.1	164	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	106-99-0	1,3-BUTADIENE			TRG	Yes	N		U		U	Y	24.8	73.7	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	541-73-1	1,3-DICHLOROBENZENE			TRG	Yes	N		U		U	Y	62.5	200	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	106-46-7	1,4-DICHLOROBENZENE			TRG	Yes	N		U		U	Y	63.7	200	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	123-91-1	1,4-DIOXANE			TRG	Yes	N		U		U	Y	48.3	120	ug/m3	4	
SV-18	DILUTION1	AV	166.7	L2244833-04	540-84-1	2,2,4-TRIMETHYLPENTANE			TRG	Yes	N		U		U	Y	28.1	156	ug/m3	4	
SV-18	DILUTION1	AV	166.7																		

#sys_sample_	lab_matrix_	dilution_f	code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name	result_value	result_typ	reportable	detect_fl	lab_qualifi	validator_q	Interpreted_q	validated_y	method_detecti	reporting_detecti	detection_limit	validation_le
			code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name		e_code	_result	ag	ers	ualifiers	ualifiers	n	on_limit	on_limit	_unit	vel
SV-18	DILUTION1	AV	166.7	L2244833-04	75-00-3		CHLOROETHANE			339	TRG	Yes	N	U		U	Y	35.4	87.9	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	67-66-3		CHLOROFORM				TRG	Yes	N	U		U	Y	51.8	163	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	74-87-3		CHLOROMETHANE			299	TRG	Yes	Y			U	Y	23.7	68.8	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	110-82-7		CYCLOHEXANE				TRG	Yes	N	U		U	Y	21.1	115	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	124-48-1		DIBROMOCHLOROMETHANE				TRG	Yes	N	U		U	Y	86.9	284	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	75-71-8		DICHLORODIFLUOROMETHANE				TRG	Yes	N	U		U	Y	48.1	165	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	64-17-5		ETHYL ALCOHOL				TRG	Yes	N	U		U	Y	230	1570	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	141-78-6		ETHYL ACETATE				TRG	Yes	N	U		U	Y	73.2	301	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	100-41-4		ETHYLBENZENE				TRG	Yes	N	U		U	Y	31.3	145	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	76-13-1		1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE				TRG	Yes	N	U		U	Y	83.5	255	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	76-14-2		1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE				TRG	Yes	N	U		U	Y	68.8	233	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	142-82-5		HEPTANE				TRG	Yes	N	U		U	Y	32.1	136	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	87-68-3		HEXACHLOROBUTADIENE				TRG	Yes	N	U		U	Y	94.1	355	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	67-63-0		ISO-PROPYL ALCOHOL				TRG	Yes	N	U		U	Y	196	205	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	1634-04-4		METHYL TERT BUTYL ETHER				TRG	Yes	N	U		U	Y	31.5	120	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	75-09-2		METHYLENE CHLORIDE				TRG	Yes	N	U		U	Y	77.5	290	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	100-42-5		STYRENE				TRG	Yes	N	U		U	Y	30.8	142	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	75-65-0		TERT-BUTYL ALCOHOL				TRG	Yes	N	U		U	Y	23.6	253	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	127-18-4		TETRACHLOROETHENE			3700	TRG	Yes	Y				Y	73.9	226	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	109-99-9		TETRAHYDROFURAN				TRG	Yes	N	U		U	Y	27.9	246	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	108-88-3		TOLUENE				TRG	Yes	N	U		U	Y	32.7	125	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	79-01-6		TRICHLOROETHENE			59700	TRG	Yes	Y				Y	45.3	179	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	75-69-4		TRICHLOROFLUOROMETHANE				TRG	Yes	N	U		U	Y	64.1	187	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	593-60-2		VINYL BROMIDE				TRG	Yes	N	U		U	Y	52.5	146	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	75-01-4		VINYL CHLORIDE				TRG	Yes	N	U		U	Y	26.6	85.1	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	156-59-2		CIS-1,2-DICHLOROETHENE			7570	TRG	Yes	Y				Y	77.3	132	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	10061-01-5		CIS-1,3-DICHLOROPROPENE				TRG	Yes	N	U		U	Y	31	151	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	110-54-3		N-HEXANE				TRG	Yes	N	U		U	Y	21.4	117	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	95-47-6		O-XYLENE				TRG	Yes	N	U		U	Y	32.8	145	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	179601-23-1		P/M-XYLENE				TRG	Yes	N	U		U	Y	66	290	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	156-60-5		TRANS-1,2-DICHLOROETHENE			199	TRG	Yes	Y				Y	42.4	132	ug/m3	4
SV-18	DILUTION1	AV	166.7	L2244833-04	10061-02-6		TRANS-1,3-DICHLOROPROPENE				TRG	Yes	N	U		U	Y	33	151	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	71-55-6		1,1,1-TRICHLOROETHANE			39900	TRG	Yes	Y				Y	70.4	281	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	79-34-5		1,1,2,2-TETRACHLOROETHANE				TRG	Yes	N	U		U	Y	108	354	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	79-00-5		1,1,2-TRICHLOROETHANE				TRG	Yes	N	U		U	Y	94.4	281	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-34-3		1,1-DICHLOROETHANE			68400	TRG	Yes	Y				Y	65.6	208	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-35-4		1,1-DICHLOROETHENE			7220	TRG	Yes	Y				Y	65.8	204	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	120-82-1		1,2,4-TRICHLOROBENZENE				TRG	Yes	N	U	UJ	UJ	Y	129	382	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	95-63-6		1,2,4-TRIMETHYLBENZENE				TRG	Yes	N	U	U	U	Y	46.6	253	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	106-93-4		1,2-DIBROMOETHANE				TRG	Yes	N	U	U	U	Y	111	396	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	95-50-1		1,2-DICHLOROBENZENE				TRG	Yes	N	U	U	U	Y	97.4	310	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	107-06-2		1,2-DICHLOROETHANE														

#sys_sample_	lab_matrix_	dilution_f	code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name	result_value	result_typ	reportable	detect_fl	lab_qualifi	validator_q	Interpreted_q	validated_y	method_detecti	reporting_detecti	detection_limit	validation_le
SV-19	DILUTION1	AV	257.7	L2244833-05	100-44-7	BENZYL CHLORIDE					TRG	Yes	N	U	U	U	Y	64.2	267	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-27-4	BROMODICHLOROMETHANE					TRG	Yes	N	U	U	U	Y	87.1	345	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-25-2	BROMOFORM					TRG	Yes	N	U	U	U	Y	171	532	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	74-83-9	BROMOMETHANE					TRG	Yes	N	U	U	U	Y	77.3	200	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-15-0	CARBON DISULFIDE					TRG	Yes	N	U	U	U	Y	44.8	160	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	56-23-5	CARBON TETRACHLORIDE					TRG	Yes	N	U	U	U	Y	80.5	324	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	108-90-7	CHLOROBENZENE					TRG	Yes	N	U	U	U	Y	74.1	237	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-00-3	CHLOROETHANE				776	TRG	Yes	Y				Y	54.6	136	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	67-66-3	CHLOROFORM					TRG	Yes	N	U	U	U	Y	79.6	251	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	74-87-3	CHLOROMETHANE					TRG	Yes	N	U	U	U	Y	36.8	106	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	110-82-7	CYCLOHEXANE					TRG	Yes	N	U	U	U	Y	32.6	177	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	124-48-1	DIBROMOCHLOROMETHANE					TRG	Yes	N	U	U	U	Y	135	439	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-71-8	DICHLORODIFLUOROMETHANE					TRG	Yes	N	U	U	U	Y	74.2	255	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	64-17-5	ETHYL ALCOHOL					TRG	Yes	N	U	U	U	Y	356	2430	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	141-78-6	ETHYL ACETATE					TRG	Yes	N	U	U	U	Y	113	465	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	100-41-4	ETHYL BENZENE					TRG	Yes	N	U	U	U	Y	48.2	224	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE					TRG	Yes	N	U	U	U	Y	130	395	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	76-14-2	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE					TRG	Yes	N	U	U	U	Y	106	360	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	142-82-5	HEPTANE					TRG	Yes	N	U	U	U	Y	49.6	211	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	87-68-3	HEXA-CHLOROBUTADIENE					TRG	Yes	N	U	U	U	Y	145	549	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	67-63-0	ISO-PROPYL ALCOHOL					TRG	Yes	N	U	U	U	Y	302	317	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	1634-04-4	METHYL TERT BUTYL ETHER					TRG	Yes	N	U	U	U	Y	48.7	186	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-09-2	METHYLENE CHLORIDE					TRG	Yes	N	U	U	U	Y	120	448	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	100-42-5	STYRENE					TRG	Yes	N	U	U	U	Y	47.7	219	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-65-0	TERT-BUTYL ALCOHOL					TRG	Yes	N	U	U	U	Y	36.4	391	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	127-18-4	TETRA-CHLOROETHENE				534	TRG	Yes	Y				Y	115	349	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	109-99-9	TETRAHYDROFURAN					TRG	Yes	N	U	U	U	Y	43.1	380	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	108-88-3	TOLUENE					TRG	Yes	N	U	U	U	Y	50.5	194	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	79-01-6	TRICHLOROETHENE				6020	TRG	Yes	Y				Y	69.9	277	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-69-4	TRICHLOROFLUOROMETHANE					TRG	Yes	N	U	U	U	Y	99.5	289	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	593-60-2	VINYL BROMIDE					TRG	Yes	N	U	U	U	Y	80.9	225	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	75-01-4	VINYL CHLORIDE				5900	TRG	Yes	Y				Y	41.4	132	ug/m3	4
SV-19	DILUTION2	AV	806.5	L2244833-05	156-59-2	CIS-1,2-DICHLOROETHENE				218000	TRG	Yes	Y				Y	374	638	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	156-59-2	CIS-1,2-DICHLOROETHENE				161000	TRG	No	Y	E	E	E	N	120	204	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	10061-01-5	CIS-1,3-DICHLOROPROPENE					TRG	Yes	N	U	U	U	Y	47.7	234	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	110-54-3	N-HEXANE					TRG	Yes	N	U	U	U	Y	33.1	182	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	95-47-6	O-XYLENE					TRG	Yes	N	U	U	U	Y	50.8	224	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	179601-23-1	P/M-XYLENE					TRG	Yes	N	U	U	U	Y	102	447	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	156-60-5	TRANS-1,2-DICHLOROETHENE				4280	TRG	Yes	Y				Y	65.8	204	ug/m3	4
SV-19	DILUTION1	AV	257.7	L2244833-05	10061-02-6	TRANS-1,3-DICHLOROPROPENE					TRG	Yes	N	U	U	U	Y	50.8	234	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	71-55-6	1,1,1-TRICHLOROETHANE				26600	TRG	Yes	Y				Y	19.5	77.5	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	79-34-5	1,1,2,2-TETRA-CHLOROETHANE					TRG	Yes	N	U	U	U	Y	30	97.5	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	79-00-5	1,1,2-TRICHLOROETHANE					TRG	Yes	N	U	U	U	Y	26	77.5	ug/m3	4
SV-28	DILUTION																				

#sys_sample_	lab_matrix_	dilution_f	code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name	result_value	result_typ	reportable	detect_fl	lab_qualifi	validator_q	Interpreted_q	validated_y	method_detecti	reporting_detecti	detection_limit	validation_le
SV-28	DILUTION1	AV	71.23	L2244833-06	540-84-1	2,2,4-TRIMETHYLPENTANE					TRG	Yes	N	U		U	Y	12	66.3	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	78-93-3	2-BUTANONE					TRG	Yes	N	U		U	Y	10.1	105	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	591-78-6	2-HEXANONE					TRG	Yes	N	U		U	Y	18.9	58.2	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	107-05-1	3-CHLOROPROPENE					TRG	Yes	N	U		U	Y	13.1	44.4	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	622-96-8	4-ETHYLTOLEUNE					TRG	Yes	N	U		U	Y	13	69.8	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	108-10-1	4-METHYL-2-PENTANONE					TRG	Yes	N	U		U	Y	12.3	146	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	67-64-1	ACETONE					TRG	Yes	N	U		U	Y	117	169	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	71-43-2	BENZENE					TRG	Yes	N	U		U	Y	11.1	45.4	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	100-44-7	BENZYL CHLORIDE					TRG	Yes	N	U		U	Y	17.8	73.5	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	75-27-4	BROMODICHLOROMETHANE					TRG	Yes	N	U		U	Y	24.1	95.1	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	75-25-2	BROMOFORM					TRG	Yes	N	U		U	Y	47.1	147	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	74-83-9	BROMOMETHANE					TRG	Yes	N	U		U	Y	21.4	55.1	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	75-15-0	CARBON DISULFIDE					TRG	Yes	N	U		U	Y	12.4	44.2	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	56-23-5	CARBON TETRACHLORIDE					TRG	Yes	N	U		U	Y	22.3	89.3	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	108-90-7	CHLOROBENZENE					TRG	Yes	N	U		U	Y	20.4	65.4	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	75-00-3	CHLOROETHANE					TRG	Yes	N	U		U	Y	15.1	37.5	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	67-66-3	CHLOROFORM				102	TRG	Yes	Y				Y	22	69.3	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	74-87-3	CHLOROMETHANE					TRG	Yes	N	U		U	Y	10.1	29.3	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	110-82-7	CYCLOHEXANE					TRG	Yes	N	U		U	Y	9.02	48.9	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	124-48-1	DIBROMOCHLOROMETHANE					TRG	Yes	N	U		U	Y	37.2	121	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	75-71-8	DICHLORODIFLUOROMETHANE					TRG	Yes	N	U		U	Y	20.5	70.2	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	64-17-5	ETHYL ALCOHOL					TRG	Yes	N	U		U	Y	98.4	671	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	141-78-6	ETHYL ACETATE					TRG	Yes	N	U		U	Y	31.3	128	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	100-41-4	ETHYL BENZENE					TRG	Yes	N	U		U	Y	13.4	61.7	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE					TRG	Yes	N	U		U	Y	35.8	109	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	76-14-2	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE					TRG	Yes	N	U		U	Y	29.4	99.3	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	142-82-5	HEPTANE					TRG	Yes	N	U		U	Y	13.7	58.2	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	87-68-3	HEXAChLOROBUTADIENE					TRG	Yes	N	U		U	Y	40.2	151	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	67-63-0	ISO-PROPYL ALCOHOL					TRG	Yes	N	U		U	Y	83.6	87.5	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	1634-04-4	METHYL TERT BUTYL ETHER					TRG	Yes	N	U		U	Y	13.5	51.2	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	75-09-2	METHYLENE CHLORIDE					TRG	Yes	N	U		U	Y	33.1	124	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	100-42-5	STYRENE					TRG	Yes	N	U		U	Y	13.2	60.5	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	75-65-0	TERT-BUTYL ALCOHOL					TRG	Yes	N	U		U	Y	10.1	108	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	127-18-4	TETRACHLOROETHENE				23300	TRG	Yes	Y				Y	31.6	96.3	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	109-99-9	TETRAHYDROFURAN					TRG	Yes	N	U		U	Y	11.9	105	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	108-88-3	TOLUENE					TRG	Yes	N	U		U	Y	13.9	53.5	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	79-01-6	TRICHLOROETHENE				4370	TRG	Yes	Y				Y	19.3	76.3	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	75-69-4	TRICHLOROFLUOROMETHANE					TRG	Yes	N	U		U	Y	27.4	79.8	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	593-60-2	VINYL BROMIDE					TRG	Yes	N	U		U	Y	22.3	62.1	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	75-01-4	VINYL CHLORIDE					TRG	Yes	N	U		U	Y	11.4	36.3	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	156-59-2	CIS-1,2-DICHLOROETHENE					TRG	Yes	N	U		U	Y	33	56.3	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	10061-01-5	CIS-1,3-DICHLOROPROPENE					TRG	Yes	N	U		U	Y	13.2	64.5	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	110-54-3	N-HEXANE				300	TRG	Yes	Y		N	N	Y	9.13	50	ug/m3	4
SV-28	DILUTION1	AV	71.23	L2244833-06	95-47-6	O-XYLENE					TRG	Yes									

#sys_sample_	lab_matrix_	dilution_f	code	test_type	code	actor	lab_sample_id	cas_rn	chemical_name	result_value	e_code	_result	ag	ers	validator_q	Interpreted_q	validated_y	method_detecti	reporting_detecti	detection_limit	validation_le
AA-03	DILUTION1	AAI	1.486	L2244833-07	107-06-2	1,2-DICHLOROETHANE				TRG	Yes	N	U		U	Y	0.362	1.2	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	78-87-5	1,2-DICHLOROPROPANE				TRG	Yes	N	U		U	Y	0.419	1.37	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	108-67-8	1,3,5-TRIMETHYLBENZENE				TRG	Yes	N	U		U	Y	0.492	1.46	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	106-99-0	1,3-BUTADIENE				TRG	Yes	N	U		U	Y	0.22	0.657	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	541-73-1	1,3-DICHLOROBENZENE				TRG	Yes	N	U		U	Y	0.56	1.79	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	106-46-7	1,4-DICHLOROBENZENE				TRG	Yes	N	U		U	Y	0.568	1.79	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	123-91-1	1,4-DIOXANE				TRG	Yes	N	U		U	Y	0.432	1.07	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	540-84-1	2,2,4-TRIMETHYLPENTANE				TRG	Yes	N	U		U	Y	0.25	1.39	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	78-93-3	2-BUTANONE				TRG	Yes	N	U		U	Y	0.211	2.19	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	591-78-6	2-HEXANONE				TRG	Yes	N	U		U	Y	0.395	1.22	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	107-05-1	3-CHLOROPROPENE				TRG	Yes	N	U		U	Y	0.272	0.93	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	622-96-8	4-ETHYLTOLUENE				TRG	Yes	N	U		U	Y	0.27	1.46	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	108-10-1	4-METHYL-2-PENTANONE				TRG	Yes	N	U		U	Y	0.257	3.04	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	67-64-1	ACETONE	12.8			TRG	Yes	Y				Y	2.42	3.54	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	71-43-2	BENZENE				TRG	Yes	N	U		U	Y	0.231	0.949	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	100-44-7	BENZYL CHLORIDE				TRG	Yes	N	U		U	Y	0.371	1.54	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	75-27-4	BROMODICHLOROMETHANE				TRG	Yes	N	U		U	Y	0.502	1.99	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	75-25-2	BROMOFORM				TRG	Yes	N	U		U	Y	0.984	3.07	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	74-83-9	BROMOMETHANE				TRG	Yes	N	U		U	Y	0.447	1.15	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	75-15-0	CARBON DISULFIDE				TRG	Yes	N	U		U	Y	0.259	0.925	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	56-23-5	CARBON TETRACHLORIDE				TRG	Yes	N	U		U	Y	0.467	1.87	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	108-90-7	CHLOROBENZENE				TRG	Yes	N	U		U	Y	0.427	1.37	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	75-00-3	CHLOROETHANE				TRG	Yes	N	U		U	Y	0.317	0.784	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	67-66-3	CHLOROFORM				TRG	Yes	N	U		U	Y	0.46	1.45	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	74-87-3	CHLOROMETHANE	1.15			TRG	Yes	Y				Y	0.211	0.613	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	110-82-7	CYCLOHEXANE				TRG	Yes	N	U		U	Y	0.188	1.02	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	124-48-1	DIBROMOCHLOROMETHANE				TRG	Yes	N	U		U	Y	0.777	2.53	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	75-71-8	DICHLORODIFLUOROMETHANE	2.73			TRG	Yes	Y				Y	0.428	1.47	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	64-17-5	ETHYL ALCOHOL				TRG	Yes	N	U		U	Y	2.05	14	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	141-78-6	ETHYL ACETATE				TRG	Yes	N	U		U	Y	0.652	2.68	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	100-41-4	ETHYL BENZENE				TRG	Yes	N	U		U	Y	0.279	1.29	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE				TRG	Yes	N	U		U	Y	0.747	2.28	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	76-14-2	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE				TRG	Yes	N	U		U	Y	0.614	2.08	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	142-82-5	HEPTANE				TRG	Yes	N	U		U	Y	0.286	1.22	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	87-68-3	HEXA-CHLOROBUTADIENE				TRG	Yes	N	U		U	Y	0.838	3.17	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	67-63-0	ISO-PROPYL ALCOHOL	2.05			TRG	Yes	Y				Y	1.75	1.83	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	1634-04-4	METHYL TERT BUTYL ETHER				TRG	Yes	N	U		U	Y	0.281	1.07	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	75-09-2	METHYLENE CHLORIDE				TRG	Yes	N	U		U	Y	0.691	2.58	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	100-42-5	STYRENE				TRG	Yes	N	U		U	Y	0.275	1.26	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	75-65-0	TERT-BUTYL ALCOHOL				TRG	Yes	N	U		U	Y	0.21	2.25	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	127-18-4	TETRA-CHLOROETHENE				TRG	Yes	N	U		U	Y	0.66	2.01	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	109-99-9	TETRAHYDROFURAN				TRG	Yes	N	U		U	Y	0.249	2.19	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	108-88-3	TOLUENE				TRG	Yes	N	U		U	Y	0.291	1.12	ug/m3	4	
AA-03	DILUTION1	AAI	1.486	L2244833-07	79-01-6	TRICHLOROETHENE				TRG	Yes	N	U		U	Y	0.403	1.6	ug/m3	4	

**B. SAMPLE DELIVERY GROUP GCJ63027**

sys_sample_c	Sample_N	Lab_Sample_I	sample_typ	chemical_name	result_value	lab_qualifie	result_uni	Validator_	Interpreted_Q	Validated_	Validation_L	result_type_c	detect_fl	Reportable_Re	reporting_dete	dilution_fa	sample_mat	method_detectio	
ode	ame	d	e_code	cas_rn		rs	t	Qualifiers	ualifiers	YN	evel	ode	ag	sult	ction_limit	ctor	rix_code	n_limit	
CJ63027	IA-3	CJ63027	N	100-41-4	Ethylbenzene	1.59	ppbv			Y	4	TRG	Y	Yes	0.23	1	AI	0.23	
CJ63027	IA-3	CJ63027	N	100-42-5	Styrene	0.391	ppbv			Y	4	TRG	Y	Yes	0.235	1	AI	0.235	
CJ63027	IA-3	CJ63027	N	100-44-7	Benzyl chloride		U	ppbv		U	Y	4	TRG	N	Yes	0.193	1	AI	0.193
CJ63027	IA-3	CJ63027	N	10061-01-5	cis-1,3-Dichloropropene		U	ppbv		U	Y	4	TRG	N	Yes	0.221	1	AI	0.221
CJ63027	IA-3	CJ63027	N	10061-02-6	trans-1,3-Dichloropropene		U	ppbv		U	Y	4	TRG	N	Yes	0.221	1	AI	0.221
CJ63027	IA-3	CJ63027	N	104-51-8	n-Butylbenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.182	1	AI	0.182
CJ63027	IA-3	CJ63027	N	106-46-7	1,4-Dichlorobenzene	6.01	ppbv			Y	4	TRG	Y	Yes	0.166	1	AI	0.166	
CJ63027	IA-3	CJ63027	N	106-93-4	1,2-Dibromoethane(EDB)		U	ppbv		U	Y	4	TRG	N	Yes	0.13	1	AI	0.13
CJ63027	IA-3	CJ63027	N	106-99-0	1,3-Butadiene		U	ppbv		U	Y	4	TRG	N	Yes	0.452	1	AI	0.452
CJ63027	IA-3	CJ63027	N	107-06-2	1,2-Dichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.247	1	AI	0.247
CJ63027	IA-3	CJ63027	N	107-13-1	Acrylonitrile		U	ppbv		U	Y	4	TRG	N	Yes	0.461	1	AI	0.461
CJ63027	IA-3	CJ63027	N	108-10-1	4-Methyl-2-pentanone(MIBK)		U	ppbv		U	Y	4	TRG	N	Yes	0.244	1	AI	0.244
CJ63027	IA-3	CJ63027	N	108-67-8	1,3,5-Trimethylbenzene	0.256	ppbv			Y	4	TRG	Y	Yes	0.204	1	AI	0.204	
CJ63027	IA-3	CJ63027	N	108-88-3	Toluene	8.05	ppbv			Y	4	TRG	Y	Yes	0.266	1	AI	0.266	
CJ63027	IA-3	CJ63027	N	108-90-7	Chlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.217	1	AI	0.217
CJ63027	IA-3	CJ63027	N	109-99-9	Tetrahydrofuran	0.6	ppbv			Y	4	TRG	Y	Yes	0.339	1	AI	0.339	
CJ63027	IA-3	CJ63027	N	110-54-3	Hexane	2.03	ppbv			Y	4	TRG	Y	Yes	0.284	1	AI	0.284	
CJ63027	IA-3	CJ63027	N	110-82-7	Cyclohexane	0.785	ppbv			Y	4	TRG	Y	Yes	0.291	1	AI	0.291	
CJ63027	IA-3	CJ63027	N	115-07-1	Propylene		U	ppbv		U	Y	4	TRG	N	Yes	0.581	1	AI	0.581
CJ63027	IA-3	CJ63027	N	120-82-1	1,2,4-Trichlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.135	1	AI	0.135
CJ63027	IA-3	CJ63027	N	123-91-1	1,4-Dioxane		U	ppbv		U	Y	4	TRG	N	Yes	0.278	1	AI	0.278
CJ63027	IA-3	CJ63027	N	124-48-1	Dibromochloromethane		U	ppbv		U	Y	4	TRG	N	Yes	0.118	1	AI	0.118
CJ63027	IA-3	CJ63027	N	127-18-4	Tetrachloroethene	0.142	ppbv			Y	4	TRG	Y	Yes	0.037	1	AI	0.037	
CJ63027	IA-3	CJ63027	N	135-98-8	sec-Butylbenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.182	1	AI	0.182
CJ63027	IA-3	CJ63027	N	141-78-6	Ethyl acetate	2.38	ppbv			Y	4	TRG	Y	Yes	0.278	1	AI	0.278	
CJ63027	IA-3	CJ63027	N	142-82-5	Heptane	1.32	ppbv	N	N	Y	4	TRG	Y	Yes	0.244	1	AI	0.244	
CJ63027	IA-3	CJ63027	N	156-59-2	Cis-1,2-Dichloroethene		U	ppbv		U	Y	4	TRG	N	Yes	0.051	1	AI	0.051
CJ63027	IA-3	CJ63027	N	156-60-5	Trans-1,2-Dichloroethene		U	ppbv		U	Y	4	TRG	N	Yes	0.252	1	AI	0.252
CJ63027	IA-3	CJ63027	N	1634-04-4	Methyl tert-butyl ether(MTBE)		U	ppbv		U	Y	4	TRG	N	Yes	0.278	1	AI	0.278
CJ63027	IA-3	CJ63027	N	179601-23-1	m,p-Xylene	8.22	ppbv			Y	4	TRG	Y	Yes	0.23	1	AI	0.23	
CJ63027	IA-3	CJ63027	N	541-73-1	1,3-Dichlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.166	1	AI	0.166
CJ63027	IA-3	CJ63027	N	56-23-5	Carbon Tetrachloride	0.115	ppbv			Y	4	TRG	Y	Yes	0.032	1	AI	0.032	
CJ63027	IA-3	CJ63027	N	591-78-6	2-Hexanone(MBK)		U	ppbv		U	Y	4	TRG	N	Yes	0.244	1	AI	0.244
CJ63027	IA-3	CJ63027	N	622-96-8	4-Ethyltoluene	0.226	ppbv			Y	4	TRG	Y	Yes	0.204	1	AI	0.204	
CJ63027	IA-3	CJ63027	N	630-20-6	1,1,1,2-Tetrachloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.146	1	AI	0.146
CJ63027	IA-3	CJ63027	N	64-17-5	Ethanol	820	E	ppbv	J	J	Y	4	TRG	Y	Yes	0.531	1	AI	0.531
CJ63027	IA-3	CJ63027	N	67-63-0	Isopropylalcohol	21.3	ppbv			Y	4	TRG	Y	Yes	0.407	1	AI	0.407	
CJ63027	IA-3	CJ63027	N	67-64-1	Acetone	35.6	ppbv			Y	4	TRG	Y	Yes	0.421	1	AI	0.421	
CJ63027	IA-3	CJ63027	N	67-66-3	Chloroform	0.325	ppbv			Y	4	TRG	Y	Yes	0.205	1	AI	0.205	
CJ63027	IA-3	CJ63027	N	71-43-2	Benzene	1.12	ppbv			Y	4	TRG	Y	Yes	0.313	1	AI	0.313	
CJ63027	IA-3	CJ63027	N	71-55-6	1,1,1-Trichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.183	1	AI	0.183
CJ63027	IA-3	CJ63027	N	74-83-9	Bromomethane		U	ppbv		U	Y	4	TRG	N	Yes	0.258	1	AI	0.258
CJ63027	IA-3	CJ63027	N	74-87-3	Chloromethane	33.3	ppbv			Y	4	TRG	Y	Yes	0.485	1	AI	0.485	
CJ63027	IA-3	CJ63027	N	75-00-3	Chloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.379	1	AI	0.379
CJ63027	IA-3	CJ63027	N	75-01-4	Vinyl Chloride		U	ppbv		U	Y	4	TRG	N	Yes	0.078	1	AI	0.078
CJ63027	IA-3	CJ63027	N	75-09-2	Methylene Chloride		U	ppbv		U	Y	4	TRG	N	Yes	0.864	1	AI	0.864
CJ63027</td																			

sys_sample_c	Sample_N	Lab_Sample_I	sample_typ	chemical_name	result_value	lab_qualifie	result_uni	Validator_	Interpreted_Q	Validated_	Validation_L	result_type_c	detect_fi	Reportable_Re	reporting_dete	dilution_fa	sample_mat	method_detectio	
ode	ame	d	e_code	cas_rn		rs	t	Qualifiers	ualifiers	YN	evel	ode	ag	sult	ction_limit	ctor	rix_code	n_limit	
CJ63027	IA-3	CJ63027	N	78-87-5	1,2-dichloropropane	2.95	U	ppbv	U	Y	4	TRG	N	Yes	0.217	1	AI	0.217	
CJ63027	IA-3	CJ63027	N	78-93-3	Methyl Ethyl Ketone		U	ppbv	U	Y	4	TRG	Y	Yes	0.339	1	AI	0.339	
CJ63027	IA-3	CJ63027	N	79-00-5	1,1,2-Trichloroethane	0.15	U	ppbv	U	Y	4	TRG	N	Yes	0.183	1	AI	0.183	
CJ63027	IA-3	CJ63027	N	79-01-6	Trichloroethene		U	ppbv	U	Y	4	TRG	Y	Yes	0.037	1	AI	0.037	
CJ63027	IA-3	CJ63027	N	79-34-5	1,1,2,2-Tetrachloroethane		U	ppbv	U	Y	4	TRG	N	Yes	0.146	1	AI	0.146	
CJ63027	IA-3	CJ63027	N	87-68-3	Hexachlorobutadiene		U	ppbv	U	Y	4	TRG	N	Yes	0.094	1	AI	0.094	
CJ63027	IA-3	CJ63027	N	95-47-6	o-Xylene	2.04		ppbv		Y	4	TRG	Y	Yes	0.23	1	AI	0.23	
CJ63027	IA-3	CJ63027	N	95-50-1	1,2-Dichlorobenzene		U	ppbv	U	Y	4	TRG	N	Yes	0.166	1	AI	0.166	
CJ63027	IA-3	CJ63027	N	95-63-6	1,2,4-Trimethylbenzene	0.868	U	ppbv	U	Y	4	TRG	Y	Yes	0.204	1	AI	0.204	
CJ63027	IA-3	CJ63027	N	98-82-8	Isopropylbenzene		U	ppbv	U	Y	4	TRG	N	Yes	0.204	1	AI	0.204	
CJ63027	IA-3	CJ63027	N	99-87-6	4-Isopropyltoluene		U	ppbv	U	Y	4	TRG	N	Yes	0.182	1	AI	0.182	
CJ63028	SV-4	CJ63028	N	100-41-4	Ethylbenzene	12.2		ppbv		Y	4	TRG	Y	Yes	1.15	5	AI	1.15	
CJ63028	SV-4	CJ63028	N	100-42-5	Styrene		U	ppbv	U	Y	4	TRG	N	Yes	1.17	5	AI	1.17	
CJ63028	SV-4	CJ63028	N	100-44-7	Benzyl chloride		U	ppbv	U	Y	4	TRG	N	Yes	0.966	5	AI	0.966	
CJ63028	SV-4	CJ63028	N	10061-01-5	cis-1,3-Dichloropropene		U	ppbv	U	Y	4	TRG	N	Yes	1.1	5	AI	1.1	
CJ63028	SV-4	CJ63028	N	10061-02-6	trans-1,3-Dichloropropene		U	ppbv	U	Y	4	TRG	N	Yes	1.1	5	AI	1.1	
CJ63028	SV-4	CJ63028	N	104-51-8	n-Butylbenzene		U	ppbv	U	Y	4	TRG	N	Yes	0.911	5	AI	0.911	
CJ63028	SV-4	CJ63028	N	106-46-7	1,4-Dichlorobenzene	0.9		ppbv	N	N	Y	4	TRG	Y	Yes	0.832	5	AI	0.832
CJ63028	SV-4	CJ63028	N	106-93-4	1,2-Dibromoethane(EDB)		U	ppbv	U	Y	4	TRG	N	Yes	0.651	5	AI	0.651	
CJ63028	SV-4	CJ63028	N	106-99-0	1,3-Butadiene	8.26		ppbv	N	N	Y	4	TRG	Y	Yes	2.26	5	AI	2.26
CJ63028	SV-4	CJ63028	N	107-06-2	1,2-Dichloroethane		U	ppbv	U	Y	4	TRG	N	Yes	1.24	5	AI	1.24	
CJ63028	SV-4	CJ63028	N	107-13-1	Acrylonitrile		U	ppbv	U	Y	4	TRG	N	Yes	2.31	5	AI	2.31	
CJ63028	SV-4	CJ63028	N	108-10-1	4-Methyl-2-pentanone(MIBK)		U	ppbv	U	Y	4	TRG	N	Yes	1.22	5	AI	1.22	
CJ63028	SV-4	CJ63028	N	108-67-8	1,3,5-Trimethylbenzene	2.75		ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02	
CJ63028	SV-4	CJ63028	N	108-88-3	Toluene	14.8		ppbv		Y	4	TRG	Y	Yes	1.33	5	AI	1.33	
CJ63028	SV-4	CJ63028	N	108-90-7	Chlorobenzene		U	ppbv	U	Y	4	TRG	N	Yes	1.09	5	AI	1.09	
CJ63028	SV-4	CJ63028	N	109-99-9	Tetrahydrofuran	34.7		ppbv		Y	4	TRG	Y	Yes	1.7	5	AI	1.7	
CJ63028	SV-4	CJ63028	N	110-54-3	Hexane	24.3		ppbv		Y	4	TRG	Y	Yes	1.42	5	AI	1.42	
CJ63028	SV-4	CJ63028	N	110-82-7	Cyclohexane	5.87		ppbv		Y	4	TRG	Y	Yes	1.45	5	AI	1.45	
CJ63028	SV-4	CJ63028	N	115-07-1	Propylene		U	ppbv	U	Y	4	TRG	N	Yes	2.91	5	AI	2.91	
CJ63028	SV-4	CJ63028	N	120-82-1	1,2,4-Trichlorobenzene		U	ppbv	U	Y	4	TRG	N	Yes	0.674	5	AI	0.674	
CJ63028	SV-4	CJ63028	N	123-91-1	1,4-Dioxane		U	ppbv	U	Y	4	TRG	N	Yes	1.39	5	AI	1.39	
CJ63028	SV-4	CJ63028	N	124-48-1	Dibromochloromethane		U	ppbv	U	Y	4	TRG	N	Yes	0.587	5	AI	0.587	
CJ63028	SV-4	CJ63028	N	135-98-8	sec-Butylbenzene		U	ppbv	U	Y	4	TRG	N	Yes	0.911	5	AI	0.911	
CJ63028	SV-4	CJ63028	N	141-78-6	Ethyl acetate		U	ppbv	U	Y	4	TRG	N	Yes	1.39	5	AI	1.39	
CJ63028	SV-4	CJ63028	N	142-82-5	Heptane	7.98		ppbv		Y	4	TRG	Y	Yes	1.22	5	AI	1.22	
CJ63028	SV-4	CJ63028	N	156-59-2	Cis-1,2-Dichloroethene	1.38		ppbv		Y	4	TRG	Y	Yes	0.252	5	AI	0.252	
CJ63028	SV-4	CJ63028	N	156-60-5	Trans-1,2-Dichloroethene		U	ppbv	U	Y	4	TRG	N	Yes	1.26	5	AI	1.26	
CJ63028	SV-4	CJ63028	N	1634-04-4	Methyl tert-butyl ether(MTBE)		U	ppbv	U	Y	4	TRG	N	Yes	1.39	5	AI	1.39	
CJ63028	SV-4	CJ63028	N	179601-23-1	m,p-Xylene	55.7		ppbv		Y	4	TRG	Y	Yes	1.15	5	AI	1.15	
CJ63028	SV-4	CJ63028	N	541-73-1	1,3-Dichlorobenzene		U	ppbv	U	Y	4	TRG	N	Yes	0.832	5	AI	0.832	
CJ63028	SV-4	CJ63028	N	56-23-5	Carbon Tetrachloride	0.29		ppbv		Y	4	TRG	Y	Yes	0.159	5	AI	0.159	
CJ63028	SV-4	CJ63028	N	591-78-6	2-Hexanone(MBK)		U	ppbv	U	Y	4	TRG	N	Yes	1.22	5	AI	1.22	
CJ63028	SV-4	CJ63028	N	622-96-8	4-Ethyltoluene	6.72		ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02	
CJ63028	SV-4	CJ63028	N	630-20-6	1,1,2-Tetrachloroethane		U	ppbv	U	Y	4	TRG	N	Yes	0.729	5	AI	0.729	
CJ63028	SV-4	CJ63028	N	64-17-5	Ethanol	157		ppbv		Y	4	TRG	Y	Yes	2.66	5	AI	2.66	
CJ63028	SV-4	CJ63028	N	67-63-0	Isopropylalcohol		U	ppbv	U	Y	4	TRG	N	Yes	2.04				

sys_sample_c	Sample_N	Lab_Sample_I	sample_typ		chemical_name	result_value	lab_qualifie	result_uni	Validator_	Interpreted_Q	Validated_	Validation_L	result_type_c	detect_fl	Reportable_Re	reporting_dete	dilution_fa	sample_mat	method_detectio
ode	ame	d	e_code	cas_rn			rs	t	Qualifiers	ualifiers	YN	evel	ode	ag	sult	ction_limit	ctor	rix_code	n_limit
CJ63028	SV-4	CJ63028	N	75-25-2	Bromoform		U	ppbv		U	Y	4	TRG	N	Yes	0.484	5	AI	0.484
CJ63028	SV-4	CJ63028	N	75-27-4	Bromodichloromethane		U	ppbv		U	Y	4	TRG	N	Yes	0.747	5	AI	0.747
CJ63028	SV-4	CJ63028	N	75-34-3	1,1-Dichloroethane	26.4		ppbv			Y	4	TRG	Y	Yes	1.24	5	AI	1.24
CJ63028	SV-4	CJ63028	N	75-35-4	1,1-Dichloroethene	23.9		ppbv			Y	4	TRG	Y	Yes	0.252	5	AI	0.252
CJ63028	SV-4	CJ63028	N	75-69-4	Trichlorofluoromethane		U	ppbv		U	Y	4	TRG	N	Yes	0.891	5	AI	0.891
CJ63028	SV-4	CJ63028	N	75-71-8	Dichlorodifluoromethane	7.23		ppbv			Y	4	TRG	Y	Yes	1.01	5	AI	1.01
CJ63028	SV-4	CJ63028	N	76-13-1	Trichlorotrifluoroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.653	5	AI	0.653
CJ63028	SV-4	CJ63028	N	76-14-2	1,2-Dichlorotetrafluoroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.716	5	AI	0.716
CJ63028	SV-4	CJ63028	N	78-87-5	1,2-dichloropropane		U	ppbv		U	Y	4	TRG	N	Yes	1.08	5	AI	1.08
CJ63028	SV-4	CJ63028	N	78-93-3	Methyl Ethyl Ketone		U	ppbv		U	Y	4	TRG	N	Yes	1.7	5	AI	1.7
CJ63028	SV-4	CJ63028	N	79-00-5	1,1,2-Trichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.917	5	AI	0.917
CJ63028	SV-4	CJ63028	N	79-01-6	Trichloroethylene	162		ppbv			Y	4	TRG	Y	Yes	0.186	5	AI	0.186
CJ63028	SV-4	CJ63028	N	79-34-5	1,1,2,2-Tetrachloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.729	5	AI	0.729
CJ63028	SV-4	CJ63028	N	87-68-3	Hexachlorobutadiene		U	ppbv		U	Y	4	TRG	N	Yes	0.469	5	AI	0.469
CJ63028	SV-4	CJ63028	N	95-47-6	o-Xylene	23.1		ppbv			Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63028	SV-4	CJ63028	N	95-50-1	1,2-Dichlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63028	SV-4	CJ63028	N	95-63-6	1,2,4-Trimethylbenzene	7.69		ppbv			Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63028	SV-4	CJ63028	N	98-82-8	Isopropylbenzene		U	ppbv		U	Y	4	TRG	N	Yes	1.02	5	AI	1.02
CJ63028	SV-4	CJ63028	N	99-87-6	4-Isopropyltoluene		U	ppbv		U	Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63028	SV-4	CJ63028	N	127-18-4	Tetrachloroethene	509		ppbv			Y	4	TRG	Y	Yes	0.553	15	AI	0.553
CJ63028	SV-4	CJ63028	N	67-64-1	Acetone	263		ppbv			Y	4	TRG	Y	Yes	6.32	15	AI	6.32
CJ63028	SV-4	CJ63028	N	71-55-6	1,1,1-Trichloroethane	779		ppbv			Y	4	TRG	Y	Yes	5.5	30	AI	5.5
CJ63029	SV-5	CJ63029	N	100-41-4	Ethylbenzene	8.4		ppbv			Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63029	SV-5	CJ63029	N	100-42-5	Styrene		U	ppbv		U	Y	4	TRG	N	Yes	1.17	5	AI	1.17
CJ63029	SV-5	CJ63029	N	100-44-7	Benzyl chloride		U	ppbv		U	Y	4	TRG	N	Yes	0.966	5	AI	0.966
CJ63029	SV-5	CJ63029	N	10061-01-5	cis-1,3-Dichloropropene		U	ppbv		U	Y	4	TRG	N	Yes	1.1	5	AI	1.1
CJ63029	SV-5	CJ63029	N	10061-02-6	trans-1,3-Dichloropropene		U	ppbv		U	Y	4	TRG	N	Yes	1.1	5	AI	1.1
CJ63029	SV-5	CJ63029	N	104-51-8	n-Butylbenzene	1.06		ppbv			Y	4	TRG	Y	Yes	0.911	5	AI	0.911
CJ63029	SV-5	CJ63029	N	106-46-7	1,4-Dichlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63029	SV-5	CJ63029	N	106-93-4	1,2-Dibromoethane(EDB)		U	ppbv		U	Y	4	TRG	N	Yes	0.651	5	AI	0.651
CJ63029	SV-5	CJ63029	N	106-99-0	1,3-Butadiene	16.8		ppbv	N	N	Y	4	TRG	Y	Yes	2.26	5	AI	2.26
CJ63029	SV-5	CJ63029	N	107-06-2	1,2-Dichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	1.24	5	AI	1.24
CJ63029	SV-5	CJ63029	N	107-13-1	Acrylonitrile		U	ppbv		U	Y	4	TRG	N	Yes	2.31	5	AI	2.31
CJ63029	SV-5	CJ63029	N	108-10-1	4-Methyl-2-pentanone(MIBK)		U	ppbv		U	Y	4	TRG	N	Yes	1.22	5	AI	1.22
CJ63029	SV-5	CJ63029	N	108-67-8	1,3,5-Trimethylbenzene	3.89		ppbv			Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63029	SV-5	CJ63029	N	108-88-3	Toluene	29.3		ppbv			Y	4	TRG	Y	Yes	1.33	5	AI	1.33
CJ63029	SV-5	CJ63029	N	108-90-7	Chlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	1.09	5	AI	1.09
CJ63029	SV-5	CJ63029	N	109-99-9	Tetrahydrofuran	52.3		ppbv			Y	4	TRG	Y	Yes	1.7	5	AI	1.7
CJ63029	SV-5	CJ63029	N	110-54-3	Hexane	20.4		ppbv			Y	4	TRG	Y	Yes	1.42	5	AI	1.42
CJ63029	SV-5	CJ63029	N	110-82-7	Cyclohexane	62.8		ppbv			Y	4	TRG	Y	Yes	1.45	5	AI	1.45
CJ63029	SV-5	CJ63029	N	115-07-1	Propylene		U	ppbv		U	Y	4	TRG	N	Yes	2.91	5	AI	2.91
CJ63029	SV-5	CJ63029	N	120-82-1	1,2,4-Trichlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.674	5	AI	0.674
CJ63029	SV-5	CJ63029	N	123-91-1	1,4-Dioxane		U	ppbv		U	Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63029	SV-5	CJ63029	N	124-48-1	Dibromochloromethane		U	ppbv		U	Y	4	TRG	N	Yes	0.587	5	AI	0.587
CJ63029	SV-5	CJ63029	N	135-98-8	sec-Butylbenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63029	SV-5	CJ63029	N	141-78-6	Ethyl acetate		U	ppbv		U	Y	4	TRG	N					

sys_sample_c	Sample_N	Lab_Sample_I	sample_typ	chemical_name	result_value	lab_qualifie	result_uni	Validator_Q	Interpreted_Q	Validated_Q	Validation_L	result_type_c	detect_fl	Reportable_Re	reporting_dete	dilution_fa	sample_mat	method_detectio
ode	ame	d	e_code	cas_rn		rs	t	Qualifiers	Qualifiers	YN	evel	ode	ag	sult	ction_limit	ctor	rix_code	n_limit
CJ63029	SV-5	CJ63029	N	67-63-0	Isopropylalcohol	11	ppbv			Y	4	TRG	Y	Yes	2.04	5	AI	2.04
CJ63029	SV-5	CJ63029	N	67-66-3	Chloroform	50.7	ppbv			Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63029	SV-5	CJ63029	N	71-43-2	Benzene	30.7	ppbv			Y	4	TRG	Y	Yes	1.57	5	AI	1.57
CJ63029	SV-5	CJ63029	N	74-83-9	Bromomethane		U	ppbv	U	Y	4	TRG	N	Yes	1.29	5	AI	1.29
CJ63029	SV-5	CJ63029	N	74-87-3	Chloromethane		U	ppbv	U	Y	4	TRG	N	Yes	2.42	5	AI	2.42
CJ63029	SV-5	CJ63029	N	75-00-3	Chloroethane	66.5	ppbv			Y	4	TRG	Y	Yes	1.9	5	AI	1.9
CJ63029	SV-5	CJ63029	N	75-09-2	Methylene Chloride	8	ppbv			Y	4	TRG	Y	Yes	4.32	5	AI	4.32
CJ63029	SV-5	CJ63029	N	75-15-0	Carbon Disulfide	2.51	ppbv			Y	4	TRG	Y	Yes	1.61	5	AI	1.61
CJ63029	SV-5	CJ63029	N	75-25-2	Bromoform		U	ppbv	U	Y	4	TRG	N	Yes	0.484	5	AI	0.484
CJ63029	SV-5	CJ63029	N	75-27-4	Bromodichloromethane		U	ppbv	U	Y	4	TRG	N	Yes	0.747	5	AI	0.747
CJ63029	SV-5	CJ63029	N	75-69-4	Trichlorofluoromethane	0.925	ppbv			Y	4	TRG	Y	Yes	0.891	5	AI	0.891
CJ63029	SV-5	CJ63029	N	75-71-8	Dichlorodifluoromethane		U	ppbv	U	Y	4	TRG	N	Yes	1.01	5	AI	1.01
CJ63029	SV-5	CJ63029	N	76-13-1	Trichlorotrifluoroethane		U	ppbv	U	Y	4	TRG	N	Yes	0.653	5	AI	0.653
CJ63029	SV-5	CJ63029	N	76-14-2	1,2-Dichlorotetrafluoroethane		U	ppbv	U	Y	4	TRG	N	Yes	0.716	5	AI	0.716
CJ63029	SV-5	CJ63029	N	78-87-5	1,2-dichloropropane		U	ppbv	U	Y	4	TRG	N	Yes	1.08	5	AI	1.08
CJ63029	SV-5	CJ63029	N	78-93-3	Methyl Ethyl Ketone	41.6	ppbv			Y	4	TRG	Y	Yes	1.7	5	AI	1.7
CJ63029	SV-5	CJ63029	N	79-00-5	1,1,2-Trichloroethane		U	ppbv	U	Y	4	TRG	N	Yes	0.917	5	AI	0.917
CJ63029	SV-5	CJ63029	N	79-34-5	1,1,2,2-Tetrachloroethane		U	ppbv	U	Y	4	TRG	N	Yes	0.729	5	AI	0.729
CJ63029	SV-5	CJ63029	N	87-68-3	Hexachlorobutadiene		U	ppbv	U	Y	4	TRG	N	Yes	0.469	5	AI	0.469
CJ63029	SV-5	CJ63029	N	95-47-6	o-Xylene	12.8	ppbv			Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63029	SV-5	CJ63029	N	95-50-1	1,2-Dichlorobenzene		U	ppbv	U	Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63029	SV-5	CJ63029	N	95-63-6	1,2,4-Trimethylbenzene	12.6	ppbv			Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63029	SV-5	CJ63029	N	98-82-8	Isopropylbenzene	1.47	ppbv			Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63029	SV-5	CJ63029	N	99-87-6	4-Isopropyltoluene		U	ppbv	U	Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63029	SV-5	CJ63029	N	127-18-4	Tetrachloroethene	375	ppbv			Y	4	TRG	Y	Yes	5.9	160	AI	5.9
CJ63029	SV-5	CJ63029	N	156-59-2	Cis-1,2-Dichloroethene	4700	ppbv			Y	4	TRG	Y	Yes	8.08	160	AI	8.08
CJ63029	SV-5	CJ63029	N	156-60-5	Trans-1,2-Dichloroethene	216	ppbv			Y	4	TRG	Y	Yes	40.4	160	AI	40.4
CJ63029	SV-5	CJ63029	N	67-64-1	Acetone	677	ppbv			Y	4	TRG	Y	Yes	67.4	160	AI	67.4
CJ63029	SV-5	CJ63029	N	71-55-6	1,1,1-Trichloroethane	9570	ppbv			Y	4	TRG	Y	Yes	147	800	AI	147
CJ63029	SV-5	CJ63029	N	75-01-4	Vinyl Chloride	295	ppbv			Y	4	TRG	Y	Yes	12.5	160	AI	12.5
CJ63029	SV-5	CJ63029	N	75-34-3	1,1-Dichloroethane	6270	ppbv			Y	4	TRG	Y	Yes	39.6	160	AI	39.6
CJ63029	SV-5	CJ63029	N	75-35-4	1,1-Dichloroethene	1180	ppbv			Y	4	TRG	Y	Yes	8.08	160	AI	8.08
CJ63029	SV-5	CJ63029	N	79-01-6	Trichloroethene	7360	ppbv			Y	4	TRG	Y	Yes	29.8	800	AI	29.8
CJ63030	IA-2	CJ63030	N	100-41-4	Ethylbenzene	2.56	ppbv			Y	4	TRG	Y	Yes	0.23	1	AI	0.23
CJ63030	IA-2	CJ63030	N	100-42-5	Styrene	1.46	ppbv			Y	4	TRG	Y	Yes	0.235	1	AI	0.235
CJ63030	IA-2	CJ63030	N	100-44-7	Benzyl chloride		U	ppbv	U	Y	4	TRG	N	Yes	0.193	1	AI	0.193
CJ63030	IA-2	CJ63030	N	10061-01-5	cis-1,3-Dichloropropene		U	ppbv	U	Y	4	TRG	N	Yes	0.221	1	AI	0.221
CJ63030	IA-2	CJ63030	N	10061-02-6	trans-1,3-Dichloropropene		U	ppbv	U	Y	4	TRG	N	Yes	0.221	1	AI	0.221
CJ63030	IA-2	CJ63030	N	104-51-8	n-Butylbenzene	0.216	ppbv	N	N	Y	4	TRG	Y	Yes	0.182	1	AI	0.182
CJ63030	IA-2	CJ63030	N	106-46-7	1,4-Dichlorobenzene	18.1	ppbv			Y	4	TRG	Y	Yes	0.166	1	AI	0.166
CJ63030	IA-2	CJ63030	N	106-93-4	1,2-Dibromoethane(EDB)		U	ppbv	U	Y	4	TRG	N	Yes	0.13	1	AI	0.13
CJ63030	IA-2	CJ63030	N	106-99-0	1,3-Butadiene	3.12	ppbv	N	N	Y	4	TRG	Y	Yes	0.452	1	AI	0.452
CJ63030	IA-2	CJ63030	N	107-06-2	1,2-Dichloroethane		U	ppbv	U	Y	4	TRG	N	Yes	0.247	1	AI	0.247
CJ63030	IA-2	CJ63030	N	107-13-1	Acrylonitrile		U	ppbv	U	Y	4	TRG	N	Yes	0.461	1	AI	0.461
CJ63030	IA-2	CJ63030	N	108-10-1	4-Methyl-2-pentanone(MIBK)		U	ppbv	U	Y	4	TRG	N	Yes	0.244	1	AI	0.244
CJ63030	IA-2	CJ63030	N	108-67-8	1,3,5-Trimethylbenzene	0.629	ppbv			Y	4	TRG	Y	Yes	0.204	1	AI	0.204
CJ63030	IA-2	CJ63030	N	108-88-3	Toluene	14	ppbv			Y	4	TRG	Y	Yes	0.266	1		

sys_sample_c	Sample_N	Lab_Sample_I	sample_typ	chemical_name	result_value	lab_qualifie	result_uni	Validator_Q	Interpreted_Q	Validated_Q	Validation_L	result_type_c	detect_fl	Reportable_Re	reporting_dete	dilution_fa	sample_mat	method_detectio	
ode	ame	d	e_code	cas_rn		rs	t	Qualifiers	Qualifiers	YN	evel	ode	ag	sult	ction_limit	ctor	rix_code	n_limit	
CJ63030	IA-2	CJ63030	N	127-18-4	Tetrachloroethene	0.433	ppbv			Y	4	TRG	Y	Yes	0.037	1	AI	0.037	
CJ63030	IA-2	CJ63030	N	135-98-8	sec-Butylbenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.182	1	AI	0.182
CJ63030	IA-2	CJ63030	N	141-78-6	Ethyl acetate	2.29		ppbv			Y	4	TRG	Y	Yes	0.278	1	AI	0.278
CJ63030	IA-2	CJ63030	N	142-82-5	Heptane	3.86	ppbv	N	N	Y	4	TRG	Y	Yes	0.244	1	AI	0.244	
CJ63030	IA-2	CJ63030	N	156-59-2	Cis-1,2-Dichloroethene		U	ppbv		U	Y	4	TRG	N	Yes	0.051	1	AI	0.051
CJ63030	IA-2	CJ63030	N	156-60-5	Trans-1,2-Dichloroethene		U	ppbv		U	Y	4	TRG	N	Yes	0.252	1	AI	0.252
CJ63030	IA-2	CJ63030	N	1634-04-4	Methyl tert-butyl ether(MTBE)		U	ppbv		U	Y	4	TRG	N	Yes	0.278	1	AI	0.278
CJ63030	IA-2	CJ63030	N	179601-23-1	m,p-Xylene	10.5	ppbv			Y	4	TRG	Y	Yes	0.23	1	AI	0.23	
CJ63030	IA-2	CJ63030	N	541-73-1	1,3-Dichlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.166	1	AI	0.166
CJ63030	IA-2	CJ63030	N	56-23-5	Carbon Tetrachloride	0.096	ppbv			Y	4	TRG	Y	Yes	0.032	1	AI	0.032	
CJ63030	IA-2	CJ63030	N	591-78-6	2-Hexanone(MBK)		U	ppbv		U	Y	4	TRG	N	Yes	0.244	1	AI	0.244
CJ63030	IA-2	CJ63030	N	622-96-8	4-Ethyltoluene	1.46	ppbv			Y	4	TRG	Y	Yes	0.204	1	AI	0.204	
CJ63030	IA-2	CJ63030	N	630-20-6	1,1,1,2-Tetrachloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.146	1	AI	0.146
CJ63030	IA-2	CJ63030	N	64-17-5	Ethanol	311	E	ppbv	J	J	Y	4	TRG	Y	Yes	0.531	1	AI	0.531
CJ63030	IA-2	CJ63030	N	67-63-0	Isopropylalcohol	25.7	ppbv			Y	4	TRG	Y	Yes	0.407	1	AI	0.407	
CJ63030	IA-2	CJ63030	N	67-64-1	Acetone	33.4	ppbv			Y	4	TRG	Y	Yes	0.421	1	AI	0.421	
CJ63030	IA-2	CJ63030	N	67-66-3	Chloroform	0.395	ppbv			Y	4	TRG	Y	Yes	0.205	1	AI	0.205	
CJ63030	IA-2	CJ63030	N	71-43-2	Benzene	6.75	ppbv			Y	4	TRG	Y	Yes	0.313	1	AI	0.313	
CJ63030	IA-2	CJ63030	N	71-55-6	1,1,1-Trichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.183	1	AI	0.183
CJ63030	IA-2	CJ63030	N	74-83-9	Bromomethane		U	ppbv		U	Y	4	TRG	N	Yes	0.258	1	AI	0.258
CJ63030	IA-2	CJ63030	N	74-87-3	Chloromethane	8.17	ppbv			Y	4	TRG	Y	Yes	0.485	1	AI	0.485	
CJ63030	IA-2	CJ63030	N	75-00-3	Chloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.379	1	AI	0.379
CJ63030	IA-2	CJ63030	N	75-01-4	Vinyl Chloride		U	ppbv		U	Y	4	TRG	N	Yes	0.078	1	AI	0.078
CJ63030	IA-2	CJ63030	N	75-09-2	Methylene Chloride	1.49	ppbv			Y	4	TRG	Y	Yes	0.864	1	AI	0.864	
CJ63030	IA-2	CJ63030	N	75-15-0	Carbon Disulfide	0.359	ppbv			Y	4	TRG	Y	Yes	0.321	1	AI	0.321	
CJ63030	IA-2	CJ63030	N	75-25-2	Bromoform		U	ppbv		U	Y	4	TRG	N	Yes	0.097	1	AI	0.097
CJ63030	IA-2	CJ63030	N	75-27-4	Bromodichloromethane		U	ppbv		U	Y	4	TRG	N	Yes	0.149	1	AI	0.149
CJ63030	IA-2	CJ63030	N	75-34-3	1,1-Dichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.247	1	AI	0.247
CJ63030	IA-2	CJ63030	N	75-35-4	1,1-Dichloroethene		U	ppbv		U	Y	4	TRG	N	Yes	0.051	1	AI	0.051
CJ63030	IA-2	CJ63030	N	75-69-4	Trichlorofluoromethane	0.37	ppbv			Y	4	TRG	Y	Yes	0.178	1	AI	0.178	
CJ63030	IA-2	CJ63030	N	75-71-8	Dichlorodifluoromethane	4.24	ppbv			Y	4	TRG	Y	Yes	0.202	1	AI	0.202	
CJ63030	IA-2	CJ63030	N	76-13-1	Trichlorotrifluoroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.131	1	AI	0.131
CJ63030	IA-2	CJ63030	N	76-14-2	1,2-Dichlorotetrafluoroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.143	1	AI	0.143
CJ63030	IA-2	CJ63030	N	78-87-5	1,2-dichloropropane		U	ppbv		U	Y	4	TRG	N	Yes	0.217	1	AI	0.217
CJ63030	IA-2	CJ63030	N	78-93-3	Methyl Ethyl Ketone	7.16	ppbv			Y	4	TRG	Y	Yes	0.339	1	AI	0.339	
CJ63030	IA-2	CJ63030	N	79-00-5	1,1,2-Trichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.183	1	AI	0.183
CJ63030	IA-2	CJ63030	N	79-01-6	Trichloroethene	0.141	ppbv			Y	4	TRG	Y	Yes	0.037	1	AI	0.037	
CJ63030	IA-2	CJ63030	N	79-34-5	1,1,2,2-Tetrachloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.146	1	AI	0.146
CJ63030	IA-2	CJ63030	N	87-68-3	Hexachlorobutadiene		U	ppbv		U	Y	4	TRG	N	Yes	0.094	1	AI	0.094
CJ63030	IA-2	CJ63030	N	95-47-6	o-Xylene	3.38	ppbv			Y	4	TRG	Y	Yes	0.23	1	AI	0.23	
CJ63030	IA-2	CJ63030	N	95-50-1	1,2-Dichlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.166	1	AI	0.166
CJ63030	IA-2	CJ63030	N	95-63-6	1,2,4-Trimethylbenzene	1.95	ppbv			Y	4	TRG	Y	Yes	0.204	1	AI	0.204	
CJ63030	IA-2	CJ63030	N	98-82-8	Isopropylbenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.204	1	AI	0.204
CJ63030	IA-2	CJ63030	N	99-87-6	4-Isopropyltoluene	0.44	ppbv			Y	4	TRG	Y	Yes	0.182	1	AI	0.182	
CJ63031	SV-6	CJ63031	N	100-41-4	Ethylbenzene	6.66	ppbv			Y	4	TRG	Y	Yes	1.15	5	AI	1.15	
CJ63031	SV-6	CJ63031	N	100-42-5	Styrene		U	ppbv		U	Y	4	TRG	N	Yes	1.17	5	AI	1.17
CJ63031	SV-																		

sys_sample_c	Sample_N	Lab_Sample_I	sample_typ		chemical_name	result_value	lab_qualifie	result_uni	Validator_	Interpreted_Q	Validated_	Validation_L	result_type_c	detect_fl	Reportable_Re	reporting_dete	dilution_fa	sample_mat	method_detectio
ode	ame	d	e_code	cas_rn			rs	t	Qualifiers	ualifiers	YN	evel	ode	ag	sult	ction_limit	ctor	rix_code	n_limit
CJ63031	SV-6	CJ63031	N	108-10-1	4-Methyl-2-pentanone(MIBK)	4.06	U	ppbv		U	Y	4	TRG	N	Yes	1.22	5	AI	1.22
CJ63031	SV-6	CJ63031	N	108-67-8	1,3,5-Trimethylbenzene	24.4		ppbv			Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63031	SV-6	CJ63031	N	108-88-3	Toluene		U	ppbv		U	Y	4	TRG	Y	Yes	1.33	5	AI	1.33
CJ63031	SV-6	CJ63031	N	108-90-7	Chlorobenzene	17.3		ppbv			Y	4	TRG	N	Yes	1.09	5	AI	1.09
CJ63031	SV-6	CJ63031	N	109-99-9	Tetrahydrofuran	19.3		ppbv			Y	4	TRG	Y	Yes	1.7	5	AI	1.7
CJ63031	SV-6	CJ63031	N	110-54-3	Hexane	8.5		ppbv			Y	4	TRG	Y	Yes	1.42	5	AI	1.42
CJ63031	SV-6	CJ63031	N	110-82-7	Cyclohexane	38.5		ppbv			Y	4	TRG	Y	Yes	1.45	5	AI	1.45
CJ63031	SV-6	CJ63031	N	115-07-1	Propylene		U	ppbv		U	Y	4	TRG	N	Yes	2.91	5	AI	2.91
CJ63031	SV-6	CJ63031	N	120-82-1	1,2,4-Trichlorobenzene			ppbv			Y	4	TRG	N	Yes	0.674	5	AI	0.674
CJ63031	SV-6	CJ63031	N	123-91-1	1,4-Dioxane		U	ppbv		U	Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63031	SV-6	CJ63031	N	124-48-1	Dibromochloromethane		U	ppbv		U	Y	4	TRG	N	Yes	0.587	5	AI	0.587
CJ63031	SV-6	CJ63031	N	127-18-4	Tetrachloroethene	196		ppbv			Y	4	TRG	Y	Yes	0.184	5	AI	0.184
CJ63031	SV-6	CJ63031	N	135-98-8	sec-Butylbenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63031	SV-6	CJ63031	N	141-78-6	Ethyl acetate		U	ppbv		U	Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63031	SV-6	CJ63031	N	142-82-5	Heptane	10.1		ppbv			Y	4	TRG	Y	Yes	1.22	5	AI	1.22
CJ63031	SV-6	CJ63031	N	156-59-2	Cis-1,2-Dichloroethene	0.435	U	ppbv		U	Y	4	TRG	Y	Yes	0.252	5	AI	0.252
CJ63031	SV-6	CJ63031	N	156-60-5	Trans-1,2-Dichloroethene			ppbv			Y	4	TRG	N	Yes	1.26	5	AI	1.26
CJ63031	SV-6	CJ63031	N	1634-04-4	Methyl tert-butyl ether(MTBE)		U	ppbv		U	Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63031	SV-6	CJ63031	N	179601-23-1	m,p-Xylene	28.8		ppbv			Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63031	SV-6	CJ63031	N	541-73-1	1,3-Dichlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63031	SV-6	CJ63031	N	56-23-5	Carbon Tetrachloride		U	ppbv		U	Y	4	TRG	N	Yes	0.159	5	AI	0.159
CJ63031	SV-6	CJ63031	N	591-78-6	2-Hexanone(MBK)		U	ppbv		U	Y	4	TRG	N	Yes	1.22	5	AI	1.22
CJ63031	SV-6	CJ63031	N	622-96-8	4-Ethyltoluene	3.56		ppbv	N	N	Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63031	SV-6	CJ63031	N	630-20-6	1,1,1,2-Tetrachloroethane	117	U	ppbv		U	Y	4	TRG	N	Yes	0.729	5	AI	0.729
CJ63031	SV-6	CJ63031	N	64-17-5	Ethanol	67-63-0		ppbv		U	Y	4	TRG	Y	Yes	2.66	5	AI	2.66
CJ63031	SV-6	CJ63031	N	67-66-3	Isopropylalcohol		U	ppbv		U	Y	4	TRG	N	Yes	2.04	5	AI	2.04
CJ63031	SV-6	CJ63031	N	67-66-3	Chloroform	4.18		ppbv			Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63031	SV-6	CJ63031	N	71-43-2	Benzene	11.3		ppbv			Y	4	TRG	Y	Yes	1.57	5	AI	1.57
CJ63031	SV-6	CJ63031	N	71-55-6	1,1,1-Trichloroethane	178		ppbv			Y	4	TRG	Y	Yes	0.917	5	AI	0.917
CJ63031	SV-6	CJ63031	N	74-83-9	Bromomethane		U	ppbv		U	Y	4	TRG	N	Yes	1.29	5	AI	1.29
CJ63031	SV-6	CJ63031	N	74-87-3	Chloromethane			ppbv			Y	4	TRG	N	Yes	2.42	5	AI	2.42
CJ63031	SV-6	CJ63031	N	75-00-3	Chloroethane		U	ppbv		U	Y	4	TRG	N	Yes	1.9	5	AI	1.9
CJ63031	SV-6	CJ63031	N	75-01-4	Vinyl Chloride			ppbv			Y	4	TRG	N	Yes	0.391	5	AI	0.391
CJ63031	SV-6	CJ63031	N	75-09-2	Methylene Chloride		U	ppbv		U	Y	4	TRG	N	Yes	4.32	5	AI	4.32
CJ63031	SV-6	CJ63031	N	75-15-0	Carbon Disulfide	5.52		ppbv			Y	4	TRG	Y	Yes	1.61	5	AI	1.61
CJ63031	SV-6	CJ63031	N	75-25-2	Bromoform		U	ppbv		U	Y	4	TRG	N	Yes	0.484	5	AI	0.484
CJ63031	SV-6	CJ63031	N	75-27-4	Bromodichloromethane		U	ppbv		U	Y	4	TRG	N	Yes	0.747	5	AI	0.747
CJ63031	SV-6	CJ63031	N	75-34-3	1,1-Dichloroethane	3.24		ppbv			Y	4	TRG	Y	Yes	1.24	5	AI	1.24
CJ63031	SV-6	CJ63031	N	75-35-4	1,1-Dichloroethene		U	ppbv		U	Y	4	TRG	N	Yes	0.252	5	AI	0.252
CJ63031	SV-6	CJ63031	N	75-69-4	Trichlorofluoromethane	1.1		ppbv			Y	4	TRG	Y	Yes	0.891	5	AI	0.891
CJ63031	SV-6	CJ63031	N	75-71-8	Dichlorodifluoromethane		U	ppbv		U	Y	4	TRG	N	Yes	1.01	5	AI	1.01
CJ63031	SV-6	CJ63031	N	76-13-1	Trichlorotrifluoroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.653	5	AI	0.653
CJ63031	SV-6	CJ63031	N	76-14-2	1,2-Dichlorotetrafluoroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.716	5	AI	0.716
CJ63031	SV-6	CJ63031	N	78-87-5	1,2-dichloropropane		U	ppbv		U	Y	4	TRG	N	Yes	1.08	5	AI	1.08
CJ63031	SV-6	CJ63031	N	78-93-3	Methyl Ethyl Ketone	25.7		ppbv			Y	4	TRG	Y	Yes	1.7	5	AI	1.7
CJ63031	SV-6	CJ63031	N	79-00-5	1,1,2-Trichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.917	5	AI	

**C. SAMPLE DELIVERY GROUP GCJ61984**

sys_sample_co	Sample_N	Lab_Sample_	sample_type	lab_anl_meth	chemical_name	result_val	lab_qualifi	Validator_Qu	Interpreted_Q	Validation_L		result_type	detect_	Reportable_	reporting_detec	dilution_fac	sample_mat	method_detecti			
										ue	ers	result_unit	alifiers	ualifiers	Validated_YN	evel	_code	flag	Result	tion_limit	tor
CJ61984	IA-1	CJ61984	N	TO15	100-41-4	Ethylbenzene	5.55	ppbv				Y		4	TRG	Y	Yes	0.23	1	AI	0.23
CJ61984	IA-1	CJ61984	N	TO15	100-42-5	Styrene	0.823	ppbv				Y		4	TRG	Y	Yes	0.235	1	AI	0.235
CJ61984	IA-1	CJ61984	N	TO15	100-44-7	Benzyl chloride		U	ppbv		U	Y		4	TRG	N	Yes	0.193	1	AI	0.193
CJ61984	IA-1	CJ61984	N	TO15	10061-01-5	cis-1,3-Dichloropropene		U	ppbv		U	Y		4	TRG	N	Yes	0.221	1	AI	0.221
CJ61984	IA-1	CJ61984	N	TO15	10061-02-6	trans-1,3-Dichloropropene		U	ppbv		U	Y		4	TRG	N	Yes	0.221	1	AI	0.221
CJ61984	IA-1	CJ61984	N	TO15	104-51-8	n-Butylbenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.182	1	AI	0.182
CJ61984	IA-1	CJ61984	N	TO15	106-46-7	1,4-Dichlorobenzene	19.1	ppbv				Y		4	TRG	Y	Yes	0.166	1	AI	0.166
CJ61984	IA-1	CJ61984	N	TO15	106-93-4	1,2-Dibromoethane(EDB)		U	ppbv		U	Y		4	TRG	N	Yes	0.13	1	AI	0.13
CJ61984	IA-1	CJ61984	N	TO15	106-99-0	1,3-Butadiene		U	ppbv		U	Y		4	TRG	N	Yes	0.452	1	AI	0.452
CJ61984	IA-1	CJ61984	N	TO15	107-06-2	1,2-Dichloroethane	0.682	ppbv				Y		4	TRG	Y	Yes	0.247	1	AI	0.247
CJ61984	IA-1	CJ61984	N	TO15	107-13-1	Acrylonitrile		U	ppbv		U	Y		4	TRG	N	Yes	0.461	1	AI	0.461
CJ61984	IA-1	CJ61984	N	TO15	108-10-1	4-Methyl-2-pentanone(MIBK)		U	ppbv		U	Y		4	TRG	N	Yes	0.244	1	AI	0.244
CJ61984	IA-1	CJ61984	N	TO15	108-67-8	1,3,5-Trimethylbenzene	0.698	ppbv				Y		4	TRG	Y	Yes	0.204	1	AI	0.204
CJ61984	IA-1	CJ61984	N	TO15	108-88-3	Toluene	16.2	ppbv				Y		4	TRG	Y	Yes	0.266	1	AI	0.266
CJ61984	IA-1	CJ61984	N	TO15	108-90-7	Chlorobenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.217	1	AI	0.217
CJ61984	IA-1	CJ61984	N	TO15	109-99-9	Tetrahydrofuran		U	ppbv		U	Y		4	TRG	N	Yes	0.339	1	AI	0.339
CJ61984	IA-1	CJ61984	N	TO15	110-54-3	Hexane	8.96	ppbv				Y		4	TRG	Y	Yes	0.284	1	AI	0.284
CJ61984	IA-1	CJ61984	N	TO15	110-82-7	Cyclohexane	3.84	ppbv				Y		4	TRG	Y	Yes	0.291	1	AI	0.291
CJ61984	IA-1	CJ61984	N	TO15	115-07-1	Propylene		U	ppbv		U	Y		4	TRG	N	Yes	0.581	1	AI	0.581
CJ61984	IA-1	CJ61984	N	TO15	120-82-1	1,2,4-Trichlorobenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.135	1	AI	0.135
CJ61984	IA-1	CJ61984	N	TO15	123-91-1	1,4-Dioxane		U	ppbv		U	Y		4	TRG	N	Yes	0.278	1	AI	0.278
CJ61984	IA-1	CJ61984	N	TO15	124-48-1	Dibromochloromethane		U	ppbv		U	Y		4	TRG	N	Yes	0.118	1	AI	0.118
CJ61984	IA-1	CJ61984	N	TO15	127-18-4	Tetrachloroethene	0.262	ppbv				Y		4	TRG	Y	Yes	0.037	1	AI	0.037
CJ61984	IA-1	CJ61984	N	TO15	135-98-8	sec-Butylbenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.182	1	AI	0.182
CJ61984	IA-1	CJ61984	N	TO15	141-78-6	Ethyl acetate		U	ppbv		U	Y		4	TRG	N	Yes	0.278	1	AI	0.278
CJ61984	IA-1	CJ61984	N	TO15	142-82-5	Heptane	3.4	ppbv				Y		4	TRG	Y	Yes	0.244	1	AI	0.244
CJ61984	IA-1	CJ61984	N	TO15	156-59-2	Cis-1,2-Dichloroethene		U	ppbv		U	Y		4	TRG	N	Yes	0.051	1	AI	0.051
CJ61984	IA-1	CJ61984	N	TO15	156-60-5	Trans-1,2-Dichloroethene		U	ppbv		U	Y		4	TRG	N	Yes	0.252	1	AI	0.252
CJ61984	IA-1	CJ61984	N	TO15	1634-04-4	Methyl tert-butyl ether(MTBE)		U	ppbv		U	Y		4	TRG	N	Yes	0.278	1	AI	0.278
CJ61984	IA-1	CJ61984	N	TO15	179601-23-1	m,p-Xylene	24.3	ppbv				Y		4	TRG	Y	Yes	0.23	1	AI	0.23
CJ61984	IA-1	CJ61984	N	TO15	541-73-1	1,3-Dichlorobenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.166	1	AI	0.166
CJ61984	IA-1	CJ61984	N	TO15	56-23-5	Carbon Tetrachloride	0.087	ppbv				Y		4	TRG	Y	Yes	0.032	1	AI	0.032
CJ61984	IA-1	CJ61984	N	TO15	591-78-6	2-Hexanone(MBK)		U	ppbv		U	Y		4	TRG	N	Yes	0.244	1	AI	0.244
CJ61984	IA-1	CJ61984	N	TO15	622-96-8	4-Ethyltoluene	1.93	ppbv				Y		4	TRG	Y	Yes	0.204	1	AI	0.204
CJ61984	IA-1	CJ61984	N	TO15	630-20-6	1,1,1-Tetrachloroethane		U	ppbv		U	Y		4	TRG	N	Yes	0.146	1	AI	0.146
CJ61984	IA-1	CJ61984	N	TO15	64-17-5	Ethanol	282	E	ppbv	J	J	Y		4	TRG	Y	Yes	0.531	1	AI	0.531
CJ61984	IA-1	CJ61984	N	TO15	67-63-0	Isopropylalcohol	18	ppbv	J+	J+	J+	Y		4	TRG	Y	Yes	0.407	1	AI	0.407
CJ61984	IA-1	CJ61984	N	TO15	67-64-1	Acetone	26.2	ppbv				Y		4	TRG	Y	Yes	0.421	1	AI	0.421
CJ61984	IA-1	CJ61984	N	TO15	67-66-3	Chloroform		U	ppbv		U	Y		4	TRG	N	Yes	0.205	1	AI	0.205
CJ61984	IA-1	CJ61984	N	TO15	71-43-2	Benzene	6.34	ppbv				Y		4	TRG	Y	Yes	0.313	1	AI	0.313
CJ61984	IA-1	CJ61984	N	TO15	71-55-6	1,1,1-Trichloroethane		U	ppbv		U	Y									

sys_sample_co	Sample_N	Lab_Sample_	sample_type	lab_anl_meth	chemical_name	result_val	lab_qualifi	Validator_Qu	Interpreted_Q	Validation_L		result_type	detect_	Reportable_	reporting_detec	dilution_fac	sample_mat	method_detecti			
										ue	ers	result_unit	alifiers	ualifiers	Validated_YN	evel	_code	flag	Result	tion_limit	tor
CJ61984	IA-1	CJ61984	N	TO15	78-93-3	Methyl Ethyl Ketone	4.91		ppbv			Y		4	TRG	Y	Yes	0.339	1	AI	0.339
CJ61984	IA-1	CJ61984	N	TO15	79-00-5	1,1,2-Trichloroethane		U	ppbv		U	Y		4	TRG	N	Yes	0.183	1	AI	0.183
CJ61984	IA-1	CJ61984	N	TO15	79-01-6	Trichloroethene	0.082		ppbv			Y		4	TRG	Y	Yes	0.037	1	AI	0.037
CJ61984	IA-1	CJ61984	N	TO15	79-34-5	1,1,2,2-Tetrachloroethane		U	ppbv		U	Y		4	TRG	N	Yes	0.146	1	AI	0.146
CJ61984	IA-1	CJ61984	N	TO15	87-68-3	Hexachlorobutadiene		U	ppbv		U	Y		4	TRG	N	Yes	0.094	1	AI	0.094
CJ61984	IA-1	CJ61984	N	TO15	95-47-6	<i>o</i> -Xylene	6.46		ppbv			Y		4	TRG	Y	Yes	0.23	1	AI	0.23
CJ61984	IA-1	CJ61984	N	TO15	95-50-1	1,2-Dichlorobenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.166	1	AI	0.166
CJ61984	IA-1	CJ61984	N	TO15	95-63-6	1,2,4-Trimethylbenzene	2.38		ppbv			Y		4	TRG	Y	Yes	0.204	1	AI	0.204
CJ61984	IA-1	CJ61984	N	TO15	98-82-8	Isopropylbenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.204	1	AI	0.204
CJ61984	IA-1	CJ61984	N	TO15	99-87-6	4-Isopropyltoluene	0.254		ppbv			Y		4	TRG	Y	Yes	0.182	1	AI	0.182
CJ61985	OA-1	CJ61985	N	TO15	100-41-4	Ethylbenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.23	1	AI	0.23
CJ61985	OA-1	CJ61985	N	TO15	100-42-5	Styrene		U	ppbv		U	Y		4	TRG	N	Yes	0.235	1	AI	0.235
CJ61985	OA-1	CJ61985	N	TO15	100-44-7	Benzyl chloride		U	ppbv		U	Y		4	TRG	N	Yes	0.193	1	AI	0.193
CJ61985	OA-1	CJ61985	N	TO15	10061-01-5	cis-1,3-Dichloropropene		U	ppbv		U	Y		4	TRG	N	Yes	0.221	1	AI	0.221
CJ61985	OA-1	CJ61985	N	TO15	10061-02-6	trans-1,3-Dichloropropene		U	ppbv		U	Y		4	TRG	N	Yes	0.221	1	AI	0.221
CJ61985	OA-1	CJ61985	N	TO15	104-51-8	n-Butylbenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.182	1	AI	0.182
CJ61985	OA-1	CJ61985	N	TO15	106-46-7	1,4-Dichlorobenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.166	1	AI	0.166
CJ61985	OA-1	CJ61985	N	TO15	106-93-4	1,2-Dibromoethane(EDB)		U	ppbv		U	Y		4	TRG	N	Yes	0.13	1	AI	0.13
CJ61985	OA-1	CJ61985	N	TO15	106-99-0	1,3-Butadiene		U	ppbv		U	Y		4	TRG	N	Yes	0.452	1	AI	0.452
CJ61985	OA-1	CJ61985	N	TO15	107-06-2	1,2-Dichloroethane		U	ppbv		U	Y		4	TRG	N	Yes	0.247	1	AI	0.247
CJ61985	OA-1	CJ61985	N	TO15	107-13-1	Acrylonitrile		U	ppbv		U	Y		4	TRG	N	Yes	0.461	1	AI	0.461
CJ61985	OA-1	CJ61985	N	TO15	108-10-1	4-Methyl-2-pentanone(MIBK)		U	ppbv		U	Y		4	TRG	N	Yes	0.244	1	AI	0.244
CJ61985	OA-1	CJ61985	N	TO15	108-67-8	1,3,5-Trimethylbenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.204	1	AI	0.204
CJ61985	OA-1	CJ61985	N	TO15	108-88-3	Toluene	0.485		ppbv			Y		4	TRG	Y	Yes	0.266	1	AI	0.266
CJ61985	OA-1	CJ61985	N	TO15	108-90-7	Chlorobenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.217	1	AI	0.217
CJ61985	OA-1	CJ61985	N	TO15	109-99-9	Tetrahydrofuran		U	ppbv		U	Y		4	TRG	N	Yes	0.339	1	AI	0.339
CJ61985	OA-1	CJ61985	N	TO15	110-54-3	Hexane	0.327		ppbv		N	Y		4	TRG	Y	Yes	0.284	1	AI	0.284
CJ61985	OA-1	CJ61985	N	TO15	110-82-7	Cyclohexane		U	ppbv		U	Y		4	TRG	N	Yes	0.291	1	AI	0.291
CJ61985	OA-1	CJ61985	N	TO15	115-07-1	Propylene		U	ppbv		U	Y		4	TRG	N	Yes	0.581	1	AI	0.581
CJ61985	OA-1	CJ61985	N	TO15	120-82-1	1,2,4-Trichlorobenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.135	1	AI	0.135
CJ61985	OA-1	CJ61985	N	TO15	123-91-1	1,4-Dioxane		U	ppbv		U	Y		4	TRG	N	Yes	0.278	1	AI	0.278
CJ61985	OA-1	CJ61985	N	TO15	124-48-1	Dibromochloromethane		U	ppbv		U	Y		4	TRG	N	Yes	0.118	1	AI	0.118
CJ61985	OA-1	CJ61985	N	TO15	127-18-4	Tetrachloroethene		U	ppbv		U	Y		4	TRG	N	Yes	0.037	1	AI	0.037
CJ61985	OA-1	CJ61985	N	TO15	135-98-8	sec-Butylbenzene		U	ppbv		U	Y		4	TRG	N	Yes	0.182	1	AI	0.182
CJ61985	OA-1	CJ61985	N	TO15	141-78-6	Ethyl acetate	0.308		ppbv			Y		4	TRG	Y	Yes	0.278	1	AI	0.278
CJ61985	OA-1	CJ61985	N	TO15	142-82-5	Heptane		U	ppbv		U	Y		4	TRG	N	Yes	0.244	1	AI	0.244
CJ61985	OA-1	CJ61985	N	TO15	156-59-2	Cis-1,2-Dichloroethene		U	ppbv		U	Y		4	TRG	N	Yes	0.051	1	AI	0.051
CJ61985	OA-1	CJ61985	N	TO15	156-60-5	Trans-1,2-Dichloroethene		U	ppbv		U	Y		4	TRG	N	Yes	0.252	1	AI	0.252
CJ61985	OA-1	CJ61985	N	TO15	1634-04-4	Methyl tert-butyl ether(MTBE)		U	ppbv		U	Y		4	TRG	N	Yes	0.278	1	AI	0.278
CJ61985	OA-1	CJ61985	N	TO15	179601-23-1	m,p-Xylene	0.257		ppbv			Y		4	TRG	Y	Yes	0.23	1	AI	0.23
CJ61985	OA-1	CJ61985	N	TO15	541-73-1	1,3-Dichlorobenzene		U	ppbv												

sys_sample_co	Sample_N	Lab_Sample_	sample_type	lab_anl_meth	chemical_name	result_val	lab_qualifi	Validator_Qu		Interpreted_Q		Validation_L		result_type	detect_	Reportable_	reporting_detec	dilution_fac	sample_mat	method_detecti
								ue	ers	result_unit	alifiers	ualifiers	Validated_YN	evel	_code	flag	Result	tion_limit	tor	rix_code
CJ61985	OA-1	CJ61985	N	TO15	75-15-0	Carbon Disulfide		U	ppbv	U		Y	4	TRG	N	Yes	0.321	1	AI	0.321
CJ61985	OA-1	CJ61985	N	TO15	75-25-2	Bromoform		U	ppbv	U		Y	4	TRG	N	Yes	0.097	1	AI	0.097
CJ61985	OA-1	CJ61985	N	TO15	75-27-4	Bromodichloromethane		U	ppbv	U		Y	4	TRG	N	Yes	0.149	1	AI	0.149
CJ61985	OA-1	CJ61985	N	TO15	75-34-3	1,1-Dichloroethane		U	ppbv	U		Y	4	TRG	N	Yes	0.247	1	AI	0.247
CJ61985	OA-1	CJ61985	N	TO15	75-35-4	1,1-Dichloroethene		U	ppbv	U		Y	4	TRG	N	Yes	0.051	1	AI	0.051
CJ61985	OA-1	CJ61985	N	TO15	75-69-4	Trichlorofluoromethane	0.253		ppbv			Y	4	TRG	Y	Yes	0.178	1	AI	0.178
CJ61985	OA-1	CJ61985	N	TO15	75-71-8	Dichlorodifluoromethane	0.549		ppbv			Y	4	TRG	Y	Yes	0.202	1	AI	0.202
CJ61985	OA-1	CJ61985	N	TO15	76-13-1	Trichlorotrifluoroethane		U	ppbv	U		Y	4	TRG	N	Yes	0.131	1	AI	0.131
CJ61985	OA-1	CJ61985	N	TO15	76-14-2	1,2-Dichlorotetrafluoroethane		U	ppbv	U		Y	4	TRG	N	Yes	0.143	1	AI	0.143
CJ61985	OA-1	CJ61985	N	TO15	78-87-5	1,2-dichloropropane		U	ppbv	U		Y	4	TRG	N	Yes	0.217	1	AI	0.217
CJ61985	OA-1	CJ61985	N	TO15	78-93-3	Methyl Ethyl Ketone	0.88		ppbv			Y	4	TRG	Y	Yes	0.339	1	AI	0.339
CJ61985	OA-1	CJ61985	N	TO15	79-00-5	1,1,2-Trichloroethane		U	ppbv	U		Y	4	TRG	N	Yes	0.183	1	AI	0.183
CJ61985	OA-1	CJ61985	N	TO15	79-01-6	Trichloroethene	0.039		ppbv			Y	4	TRG	Y	Yes	0.037	1	AI	0.037
CJ61985	OA-1	CJ61985	N	TO15	79-34-5	1,1,2,2-Tetrachloroethane		U	ppbv	U		Y	4	TRG	N	Yes	0.146	1	AI	0.146
CJ61985	OA-1	CJ61985	N	TO15	87-68-3	Hexachlorobutadiene		U	ppbv	U		Y	4	TRG	N	Yes	0.094	1	AI	0.094
CJ61985	OA-1	CJ61985	N	TO15	95-47-6	o-Xylene		U	ppbv	U		Y	4	TRG	N	Yes	0.23	1	AI	0.23
CJ61985	OA-1	CJ61985	N	TO15	95-50-1	1,2-Dichlorobenzene		U	ppbv	U		Y	4	TRG	N	Yes	0.166	1	AI	0.166
CJ61985	OA-1	CJ61985	N	TO15	95-63-6	1,2,4-Trimethylbenzene		U	ppbv	U		Y	4	TRG	N	Yes	0.204	1	AI	0.204
CJ61985	OA-1	CJ61985	N	TO15	98-82-8	Isopropylbenzene		U	ppbv	U		Y	4	TRG	N	Yes	0.204	1	AI	0.204
CJ61985	OA-1	CJ61985	N	TO15	99-87-6	4-Isopropyltoluene		U	ppbv	U		Y	4	TRG	N	Yes	0.182	1	AI	0.182

**D. SAMPLE DELIVERY GROUP GCJ63992**

sys_sample_c	Sample_N	Lab_Sample_I	sample_type	chemical_name	result_value	lab_qualifiers	validator_u	Interpreted_Qualifiers	Validated_Qualifiers	Validation_Le	result_type_c	detect_ode	Reportable_flag	reporting_dete	dilution_factor	sample_matr_ix_code	method_dete	
CJ63992	SV-1	CJ63992	N	100-41-4	Ethylbenzene	5.68	U	ppbv	Y	4	TRG	Y	Yes	1.15	5	AI	1.15	
CJ63992	SV-1	CJ63992	N	100-42-5	Styrene	1.34		ppbv	U	Y	4	TRG	N	Yes	1.17	5	AI	1.17
CJ63992	SV-1	CJ63992	N	100-44-7	Benzyl chloride			ppbv	N	Y	4	TRG	Y	Yes	0.966	5	AI	0.966
CJ63992	SV-1	CJ63992	N	10061-01-5	cis-1,3-Dichloropropene			ppbv	U	Y	4	TRG	N	Yes	1.1	5	AI	1.1
CJ63992	SV-1	CJ63992	N	10061-02-6	trans-1,3-Dichloropropene			ppbv	U	Y	4	TRG	N	Yes	1.1	5	AI	1.1
CJ63992	SV-1	CJ63992	N	104-51-8	n-Butylbenzene			ppbv	U	Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63992	SV-1	CJ63992	N	106-46-7	1,4-Dichlorobenzene			ppbv	U	Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63992	SV-1	CJ63992	N	106-93-4	1,2-Dibromoethane(EDB)			ppbv	U	Y	4	TRG	N	Yes	0.651	5	AI	0.651
CJ63992	SV-1	CJ63992	N	106-99-0	1,3-Butadiene			ppbv	U	Y	4	TRG	N	Yes	2.26	5	AI	2.26
CJ63992	SV-1	CJ63992	N	107-06-2	1,2-Dichloroethane			ppbv	U	Y	4	TRG	N	Yes	1.24	5	AI	1.24
CJ63992	SV-1	CJ63992	N	107-13-1	Acrylonitrile			ppbv	U	Y	4	TRG	N	Yes	2.31	5	AI	2.31
CJ63992	SV-1	CJ63992	N	108-10-1	4-Methyl-2-pentanone(MIBK)			ppbv	U	Y	4	TRG	N	Yes	1.22	5	AI	1.22
CJ63992	SV-1	CJ63992	N	108-67-8	1,3,5-Trimethylbenzene	3.36		ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63992	SV-1	CJ63992	N	108-88-3	Toluene	18.8		ppbv		Y	4	TRG	Y	Yes	1.33	5	AI	1.33
CJ63992	SV-1	CJ63992	N	108-90-7	Chlorobenzene			ppbv	U	Y	4	TRG	N	Yes	1.09	5	AI	1.09
CJ63992	SV-1	CJ63992	N	109-99-9	Tetrahydrofuran	9.51		ppbv		Y	4	TRG	Y	Yes	1.7	5	AI	1.7
CJ63992	SV-1	CJ63992	N	110-54-3	Hexane	4.04		ppbv		Y	4	TRG	Y	Yes	1.42	5	AI	1.42
CJ63992	SV-1	CJ63992	N	110-82-7	Cyclohexane	2.4		ppbv		Y	4	TRG	Y	Yes	1.45	5	AI	1.45
CJ63992	SV-1	CJ63992	N	115-07-1	Propylene	4.58		ppbv		Y	4	TRG	Y	Yes	2.91	5	AI	2.91
CJ63992	SV-1	CJ63992	N	120-82-1	1,2,4-Trichlorobenzene			ppbv	U	Y	4	TRG	N	Yes	0.674	5	AI	0.674
CJ63992	SV-1	CJ63992	N	123-91-1	1,4-Dioxane			ppbv	U	Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63992	SV-1	CJ63992	N	124-48-1	Dibromochloromethane			ppbv	U	Y	4	TRG	N	Yes	0.587	5	AI	0.587
CJ63992	SV-1	CJ63992	N	127-18-4	Tetrachloroethene	64.8		ppbv		Y	4	TRG	Y	Yes	0.184	5	AI	0.184
CJ63992	SV-1	CJ63992	N	135-98-8	sec-Butylbenzene			ppbv	U	Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63992	SV-1	CJ63992	N	141-78-6	Ethyl acetate			ppbv	U	Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63992	SV-1	CJ63992	N	142-82-5	Heptane	4.3		ppbv		Y	4	TRG	Y	Yes	1.22	5	AI	1.22
CJ63992	SV-1	CJ63992	N	156-59-2	Cis-1,2-Dichloroethene			ppbv	U	Y	4	TRG	N	Yes	0.252	5	AI	0.252
CJ63992	SV-1	CJ63992	N	156-60-5	Trans-1,2-Dichloroethene			ppbv	U	Y	4	TRG	N	Yes	1.26	5	AI	1.26
CJ63992	SV-1	CJ63992	N	1634-04-4	Methyl tert-butyl ether(MTBE)			ppbv	U	Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63992	SV-1	CJ63992	N	179601-23-1	m,p-Xylene	24.5		ppbv		Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63992	SV-1	CJ63992	N	541-73-1	1,3-Dichlorobenzene			ppbv	U	Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63992	SV-1	CJ63992	N	56-23-5	Carbon Tetrachloride	5.42		ppbv		Y	4	TRG	Y	Yes	0.159	5	AI	0.159
CJ63992	SV-1	CJ63992	N	591-78-6	2-Hexanone(MBK)	6.35		ppbv		Y	4	TRG	Y	Yes	1.22	5	AI	1.22
CJ63992	SV-1	CJ63992	N	622-96-8	4-Ethyltoluene	2.95		ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63992	SV-1	CJ63992	N	630-20-6	1,1,1,2-Tetrachloroethane			ppbv	U	Y	4	TRG	N	Yes	0.729	5	AI	0.729
CJ63992	SV-1	CJ63992	N	64-17-5	Ethanol	52.4		ppbv	J	Y	4	TRG	Y	Yes	2.66	5	AI	2.66
CJ63992	SV-1	CJ63992	N	67-63-0	Isopropylalcohol			ppbv	U	Y	4	TRG	N	Yes	2.04	5	AI	2.04
CJ63992	SV-1	CJ63992	N	67-64-1	Acetone	147		ppbv		Y	4	TRG	Y	Yes	2.11	5	AI	2.11
CJ63992	SV-1	CJ63992	N	67-66-3	Chloroform	1.16		ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63992	SV-1	CJ63992	N	71-43-2	Benzene	2.81		ppbv		Y	4	TRG	Y	Yes	1.57	5	AI	1.57
CJ63992	SV-1	CJ63992	N	71-55-6	1,1,1-Trichloroethane	1.31		ppbv		Y	4	TRG	Y	Yes	0.917	5	AI	0.917
CJ63992	SV-1	CJ63992	N	74-83-9	Bromomethane			ppbv	U	Y	4	TRG	N	Yes	1.29	5	AI	1.29
CJ63992	SV-1	CJ63992	N	74-87-3	Chloromethane			ppbv	U	Y	4	TRG	N	Yes	2.42	5	AI	2.42
CJ63992	SV-1	CJ63992	N	75-00-3	Chloroethane			ppbv	U	Y	4	TRG	N	Yes	1.9	5	AI	1.9
CJ63992	SV-1	CJ63992	N	75-01-4	Vinyl Chloride			ppbv	U	Y	4	TRG	N	Yes	0.391	5	AI	0.391
CJ63992	SV-1	CJ63992	N	75-09-2	Methylene Chloride			ppbv	U	Y	4	TRG	N	Yes	4.32	5	AI	4.32
CJ63992	SV-1	CJ63992	N	75-15-0	Carbon Disulfide			ppbv	U	Y	4	TRG	N	Yes	1.61	5	AI	1.61
CJ63992	SV-1	CJ63992	N	75-25-2	Bromoform			ppbv	U	Y	4	TRG	N	Yes	0.484	5	AI	0.484
CJ63992	SV-1	CJ63992	N	75-27-4	Bromodichloromethane			ppbv	U	Y	4	TRG	N	Yes	0.747	5	AI	0.747
CJ63992	SV-1	CJ63992	N	75-34-3	1,1-Dichloroethane</													

sys_sample_c	Sample_N	Lab_Sample_I	sample_type	chemical_name	result_value	lab_qualifiers	result_u	Validator_	Interpreted	Validated	Validation_Le	result_type_c	detect_	Reportable	reporting_dete	dilution_	sample_matr	method_dete
ode	ame	d	_code	cas_rn			nit	Qualifiers	_Qualifiers	_YN	vel	ode	flag	_Result	tion_limit	factor	ix_code	ction_limit
CJ63992	SV-1	CJ63992	N	76-13-1	Trichlorotrifluoroethane		U	ppbv		Y	4	TRG	N	Yes	0.653	5	AI	0.653
CJ63992	SV-1	CJ63992	N	76-14-2	1,2-Dichlorotetrafluoroethane		U	ppbv		Y	4	TRG	N	Yes	0.716	5	AI	0.716
CJ63992	SV-1	CJ63992	N	78-87-5	1,2-dichloropropane		U	ppbv		Y	4	TRG	N	Yes	1.08	5	AI	1.08
CJ63992	SV-1	CJ63992	N	78-93-3	Methyl Ethyl Ketone		U	ppbv		Y	4	TRG	N	Yes	1.7	5	AI	1.7
CJ63992	SV-1	CJ63992	N	79-00-5	1,1,2-Trichloroethane		U	ppbv		Y	4	TRG	N	Yes	0.917	5	AI	0.917
CJ63992	SV-1	CJ63992	N	79-01-6	Trichloroethene		U	ppbv		Y	4	TRG	N	Yes	0.186	5	AI	0.186
CJ63992	SV-1	CJ63992	N	79-34-5	1,1,2,2-Tetrachloroethane		U	ppbv		Y	4	TRG	N	Yes	0.729	5	AI	0.729
CJ63992	SV-1	CJ63992	N	87-68-3	Hexachlorobutadiene		U	ppbv		Y	4	TRG	N	Yes	0.469	5	AI	0.469
CJ63992	SV-1	CJ63992	N	95-47-6	o-Xylene	9.87		ppbv		Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63992	SV-1	CJ63992	N	95-50-1	1,2-Dichlorobenzene		U	ppbv		Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63992	SV-1	CJ63992	N	95-63-6	1,2,4-Trimethylbenzene	9.04		ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63992	SV-1	CJ63992	N	98-82-8	Isopropylbenzene		U	ppbv		Y	4	TRG	N	Yes	1.02	5	AI	1.02
CJ63992	SV-1	CJ63992	N	99-87-6	4-Isopropyltoluene		U	ppbv		Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63993	SV-2	CJ63993	N	100-41-4	Ethylbenzene	4.96		ppbv		Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63993	SV-2	CJ63993	N	100-42-5	Styrene		U	ppbv		Y	4	TRG	N	Yes	1.17	5	AI	1.17
CJ63993	SV-2	CJ63993	N	100-44-7	Benzyl chloride		U	ppbv		Y	4	TRG	N	Yes	0.966	5	AI	0.966
CJ63993	SV-2	CJ63993	N	10061-01-5	cis-1,3-Dichloropropene		U	ppbv		Y	4	TRG	N	Yes	1.1	5	AI	1.1
CJ63993	SV-2	CJ63993	N	10061-02-6	trans-1,3-Dichloropropene		U	ppbv		Y	4	TRG	N	Yes	1.1	5	AI	1.1
CJ63993	SV-2	CJ63993	N	104-51-8	n-Butylbenzene		U	ppbv		Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63993	SV-2	CJ63993	N	106-46-7	1,4-Dichlorobenzene		U	ppbv		Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63993	SV-2	CJ63993	N	106-93-4	1,2-Dibromoethane(EDB)		U	ppbv		Y	4	TRG	N	Yes	0.651	5	AI	0.651
CJ63993	SV-2	CJ63993	N	106-99-0	1,3-Butadiene		U	ppbv		Y	4	TRG	N	Yes	2.26	5	AI	2.26
CJ63993	SV-2	CJ63993	N	107-06-2	1,2-Dichloroethane		U	ppbv		Y	4	TRG	N	Yes	1.24	5	AI	1.24
CJ63993	SV-2	CJ63993	N	107-13-1	Acrylonitrile		U	ppbv		Y	4	TRG	N	Yes	2.31	5	AI	2.31
CJ63993	SV-2	CJ63993	N	108-10-1	4-Methyl-2-pentanone(MIBK)		U	ppbv		Y	4	TRG	N	Yes	1.22	5	AI	1.22
CJ63993	SV-2	CJ63993	N	108-67-8	1,3,5-Trimethylbenzene	3.31		ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63993	SV-2	CJ63993	N	108-88-3	Toluene	17.1		ppbv		Y	4	TRG	Y	Yes	1.33	5	AI	1.33
CJ63993	SV-2	CJ63993	N	108-90-7	Chlorobenzene		U	ppbv		Y	4	TRG	N	Yes	1.09	5	AI	1.09
CJ63993	SV-2	CJ63993	N	109-99-9	Tetrahydrofuran	26.6		ppbv		Y	4	TRG	Y	Yes	1.7	5	AI	1.7
CJ63993	SV-2	CJ63993	N	110-54-3	Hexane	9.15		ppbv		Y	4	TRG	Y	Yes	1.42	5	AI	1.42
CJ63993	SV-2	CJ63993	N	110-82-7	Cyclohexane	5.38		ppbv		Y	4	TRG	Y	Yes	1.45	5	AI	1.45
CJ63993	SV-2	CJ63993	N	115-07-1	Propylene		U	ppbv		Y	4	TRG	N	Yes	2.91	5	AI	2.91
CJ63993	SV-2	CJ63993	N	120-82-1	1,2,4-Trichlorobenzene		U	ppbv		Y	4	TRG	N	Yes	0.674	5	AI	0.674
CJ63993	SV-2	CJ63993	N	123-91-1	1,4-Dioxane		U	ppbv		Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63993	SV-2	CJ63993	N	124-48-1	Dibromochloromethane		U	ppbv		Y	4	TRG	N	Yes	0.587	5	AI	0.587
CJ63993	SV-2	CJ63993	N	127-18-4	Tetrachloroethene	5.48		ppbv		Y	4	TRG	Y	Yes	0.184	5	AI	0.184
CJ63993	SV-2	CJ63993	N	135-98-8	sec-Butylbenzene		U	ppbv		Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63993	SV-2	CJ63993	N	141-78-6	Ethyl acetate		U	ppbv		Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63993	SV-2	CJ63993	N	142-82-5	Heptane	4.72		ppbv		Y	4	TRG	Y	Yes	1.22	5	AI	1.22
CJ63993	SV-2	CJ63993	N	156-59-2	Cis-1,2-Dichloroethene		U	ppbv		Y	4	TRG	N	Yes	0.252	5	AI	0.252
CJ63993	SV-2	CJ63993	N	156-60-5	Trans-1,2-Dichloroethene		U	ppbv		Y	4	TRG	N	Yes	1.26	5	AI	1.26
CJ63993	SV-2	CJ63993	N	1634-04-4	Methyl tert-butyl ether(MTBE)		U	ppbv		Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63993	SV-2	CJ63993	N	179601-23-1	m,p-Xylene	21.5		ppbv		Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63993	SV-2	CJ63993	N	541-73-1	1,3-Dichlorobenzene		U	ppbv		Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63993	SV-2	CJ63993	N	56-23-5	Carbon Tetrachloride	1.22		ppbv		Y	4	TRG	Y	Yes	0.159	5	AI	0.159
CJ63993	SV-2	CJ63993	N	591-78-6	2-Hexanone(MBK)		U	ppbv		Y	4	TRG	N	Yes	1.22	5	AI	1.22
CJ63993	SV-2	CJ63993	N	622-96-8	4-Ethyltoluene	8.35		ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63993	SV-2	CJ63993	N	630-20-6	1,1,1,2-Tetrachloroethane		U	ppbv</td										

sys_sample_c	Sample_N	Lab_Sample_I	sample_type	chemical_name	result_value	lab_qualifiers	result_u	Validator_	Interpreted	Validated	Validation_Le	result_type_c	detect_	Reportable	reporting_dete	dilution_	sample_matr	method_dete
ode	ame	d	_code	cas_rn			nit	Qualifiers	_Qualifiers	_YN	vel	ode	flag	_Result	tion_limit	factor	ix_code	ction_limit
CJ63993	SV-2	CJ63993	N	71-55-6	1,1,1-Trichloroethane	8.04	U	ppbv		Y	4	TRG	Y	Yes	0.917	5	AI	0.917
CJ63993	SV-2	CJ63993	N	74-83-9	Bromomethane		U	ppbv		Y	4	TRG	N	Yes	1.29	5	AI	1.29
CJ63993	SV-2	CJ63993	N	74-87-3	Chloromethane		U	ppbv		Y	4	TRG	N	Yes	2.42	5	AI	2.42
CJ63993	SV-2	CJ63993	N	75-00-3	Chloroethane		U	ppbv		Y	4	TRG	N	Yes	1.9	5	AI	1.9
CJ63993	SV-2	CJ63993	N	75-01-4	Vinyl Chloride		U	ppbv		Y	4	TRG	N	Yes	0.391	5	AI	0.391
CJ63993	SV-2	CJ63993	N	75-09-2	Methylene Chloride	2.37	U	ppbv		Y	4	TRG	N	Yes	4.32	5	AI	4.32
CJ63993	SV-2	CJ63993	N	75-15-0	Carbon Disulfide		U	ppbv		Y	4	TRG	Y	Yes	1.61	5	AI	1.61
CJ63993	SV-2	CJ63993	N	75-25-2	Bromoform		U	ppbv		Y	4	TRG	N	Yes	0.484	5	AI	0.484
CJ63993	SV-2	CJ63993	N	75-27-4	Bromodichloromethane		U	ppbv		Y	4	TRG	N	Yes	0.747	5	AI	0.747
CJ63993	SV-2	CJ63993	N	75-34-3	1,1-Dichloroethane		U	ppbv		Y	4	TRG	N	Yes	1.24	5	AI	1.24
CJ63993	SV-2	CJ63993	N	75-35-4	1,1-Dichloroethene		U	ppbv		Y	4	TRG	N	Yes	0.252	5	AI	0.252
CJ63993	SV-2	CJ63993	N	75-69-4	Trichlorofluoromethane	2.55	U	ppbv		Y	4	TRG	N	Yes	0.891	5	AI	0.891
CJ63993	SV-2	CJ63993	N	75-71-8	Dichlorodifluoromethane		U	ppbv		Y	4	TRG	Y	Yes	1.01	5	AI	1.01
CJ63993	SV-2	CJ63993	N	76-13-1	Trichlorotrifluoroethane		U	ppbv		Y	4	TRG	N	Yes	0.653	5	AI	0.653
CJ63993	SV-2	CJ63993	N	76-14-2	1,2-Dichlorotetrafluoroethane		U	ppbv		Y	4	TRG	N	Yes	0.716	5	AI	0.716
CJ63993	SV-2	CJ63993	N	78-87-5	1,2-dichloropropane		U	ppbv		Y	4	TRG	N	Yes	1.08	5	AI	1.08
CJ63993	SV-2	CJ63993	N	78-93-3	Methyl Ethyl Ketone		U	ppbv		Y	4	TRG	N	Yes	1.7	5	AI	1.7
CJ63993	SV-2	CJ63993	N	79-00-5	1,1,2-Trichloroethane		U	ppbv		Y	4	TRG	N	Yes	0.917	5	AI	0.917
CJ63993	SV-2	CJ63993	N	79-01-6	Trichloroethene		U	ppbv		Y	4	TRG	N	Yes	0.186	5	AI	0.186
CJ63993	SV-2	CJ63993	N	79-34-5	1,1,2,2-Tetrachloroethane		U	ppbv		Y	4	TRG	N	Yes	0.729	5	AI	0.729
CJ63993	SV-2	CJ63993	N	87-68-3	Hexachlorobutadiene		U	ppbv		Y	4	TRG	N	Yes	0.469	5	AI	0.469
CJ63993	SV-2	CJ63993	N	95-47-6	o-Xylene	8.91	U	ppbv		Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63993	SV-2	CJ63993	N	95-50-1	1,2-Dichlorobenzene		U	ppbv		Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63993	SV-2	CJ63993	N	95-63-6	1,2,4-Trimethylbenzene	10.6	U	ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63993	SV-2	CJ63993	N	98-82-8	Isopropylbenzene		U	ppbv		Y	4	TRG	N	Yes	1.02	5	AI	1.02
CJ63993	SV-2	CJ63993	N	99-87-6	4-Isopropyltoluene		U	ppbv		Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63994	SV-3	CJ63994	N	100-41-4	Ethylbenzene	5.72	U	ppbv		Y	4	TRG	Y	Yes	1.15	5	AI	1.15
CJ63994	SV-3	CJ63994	N	100-42-5	Styrene		U	ppbv		Y	4	TRG	N	Yes	1.17	5	AI	1.17
CJ63994	SV-3	CJ63994	N	100-44-7	Benzyl chloride		U	ppbv		Y	4	TRG	N	Yes	0.966	5	AI	0.966
CJ63994	SV-3	CJ63994	N	10061-01-5	cis-1,3-Dichloropropene		U	ppbv		Y	4	TRG	N	Yes	1.1	5	AI	1.1
CJ63994	SV-3	CJ63994	N	10061-02-6	trans-1,3-Dichloropropene		U	ppbv		Y	4	TRG	N	Yes	1.1	5	AI	1.1
CJ63994	SV-3	CJ63994	N	104-51-8	n-Butylbenzene		U	ppbv		Y	4	TRG	N	Yes	0.911	5	AI	0.911
CJ63994	SV-3	CJ63994	N	106-46-7	1,4-Dichlorobenzene		U	ppbv		Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63994	SV-3	CJ63994	N	106-93-4	1,2-Dibromoethane(EDB)		U	ppbv		Y	4	TRG	N	Yes	0.651	5	AI	0.651
CJ63994	SV-3	CJ63994	N	106-99-0	1,3-Butadiene		U	ppbv		Y	4	TRG	N	Yes	2.26	5	AI	2.26
CJ63994	SV-3	CJ63994	N	107-06-2	1,2-Dichloroethane		U	ppbv		Y	4	TRG	N	Yes	1.24	5	AI	1.24
CJ63994	SV-3	CJ63994	N	107-13-1	Acrylonitrile		U	ppbv		Y	4	TRG	N	Yes	2.31	5	AI	2.31
CJ63994	SV-3	CJ63994	N	108-10-1	4-Methyl-2-pentanone(MIBK)	4.31		ppbv		Y	4	TRG	Y	Yes	1.22	5	AI	1.22
CJ63994	SV-3	CJ63994	N	108-67-8	1,3,5-Trimethylbenzene	2.93		ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02
CJ63994	SV-3	CJ63994	N	108-88-3	Toluene	14.1		ppbv		Y	4	TRG	Y	Yes	1.33	5	AI	1.33
CJ63994	SV-3	CJ63994	N	108-90-7	Chlorobenzene		U	ppbv		Y	4	TRG	N	Yes	1.09	5	AI	1.09
CJ63994	SV-3	CJ63994	N	109-99-9	Tetrahydrofuran	16.8		ppbv		Y	4	TRG	Y	Yes	1.7	5	AI	1.7
CJ63994	SV-3	CJ63994	N	110-54-3	Hexane	3.77		ppbv		Y	4	TRG	Y	Yes	1.42	5	AI	1.42
CJ63994	SV-3	CJ63994	N	110-82-7	Cyclohexane	2.17		ppbv		Y	4	TRG	Y	Yes	1.45	5	AI	1.45
CJ63994	SV-3	CJ63994	N	115-07-1	Propylene		U	ppbv		Y	4	TRG	N	Yes	2.91	5	AI	2.91
CJ63994	SV-3	CJ63994	N	120-82-1	1,2,4-Trichlorobenzene		U	ppbv		Y	4	TRG	N	Yes	0.674	5	AI	0.674
CJ63994	SV-3	CJ63994	N	123-91-1	1,4-Dioxane		U	ppbv		Y	4	TRG	N	Yes	1.39	5	AI	1.39
CJ63994	SV-3	CJ63994	N	124-48-1	Dibromochloromethane		U	ppbv		Y	4	TRG						

sys_sample_c	Sample_N	Lab_Sample_I	sample_type	chemical_name	result_value	lab_qualifiers	Validator_u	Interpreted	Validated	Validation_Le	result_type_c	detect_	Reportable	reporting_detec	dilution_	sample_matr	method_dete		
ode	ame	d	_code	cas_rn			nit	Qualifiers	_Qualifiers	_YN	vel	ode	flag	_Result	tion_limit	factor	ix_code	ction_limit	
CJ63994	SV-3	CJ63994	N	156-60-5	Trans-1,2-Dichloroethene		U	ppbv		Y	4	TRG	N	Yes	1.26	5	AI	1.26	
CJ63994	SV-3	CJ63994	N	1634-04-4	Methyl tert-butyl ether(MTBE)	25.1	U	ppbv		Y	4	TRG	N	Yes	1.39	5	AI	1.39	
CJ63994	SV-3	CJ63994	N	179601-23-1	m,p-Xylene		U	ppbv		Y	4	TRG	Y	Yes	1.15	5	AI	1.15	
CJ63994	SV-3	CJ63994	N	541-73-1	1,3-Dichlorobenzene		U	ppbv		Y	4	TRG	N	Yes	0.832	5	AI	0.832	
CJ63994	SV-3	CJ63994	N	56-23-5	Carbon Tetrachloride	0.305	U	ppbv		Y	4	TRG	Y	Yes	0.159	5	AI	0.159	
CJ63994	SV-3	CJ63994	N	591-78-6	2-Hexanone(MBK)		U	ppbv		Y	4	TRG	N	Yes	1.22	5	AI	1.22	
CJ63994	SV-3	CJ63994	N	622-96-8	4-Ethyltoluene	8.4	U	ppbv		Y	4	TRG	Y	Yes	1.02	5	AI	1.02	
CJ63994	SV-3	CJ63994	N	630-20-6	1,1,1,2-Tetrachloroethane		U	ppbv		Y	4	TRG	N	Yes	0.729	5	AI	0.729	
CJ63994	SV-3	CJ63994	N	64-17-5	Ethanol	126	ppbv	J	J	Y	4	TRG	Y	Yes	2.66	5	AI	2.66	
CJ63994	SV-3	CJ63994	N	67-63-0	Isopropylalcohol	8.66	ppbv	N	N	Y	4	TRG	Y	Yes	2.04	5	AI	2.04	
CJ63994	SV-3	CJ63994	N	67-64-1	Acetone	198	ppbv			Y	4	TRG	Y	Yes	2.11	5	AI	2.11	
CJ63994	SV-3	CJ63994	N	67-66-3	Chloroform	50	ppbv			Y	4	TRG	Y	Yes	1.02	5	AI	1.02	
CJ63994	SV-3	CJ63994	N	71-43-2	Benzene		U	ppbv		U	Y	4	TRG	N	Yes	1.57	5	AI	1.57
CJ63994	SV-3	CJ63994	N	71-55-6	1,1,1-Trichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.917	5	AI	0.917
CJ63994	SV-3	CJ63994	N	74-83-9	Bromomethane		U	ppbv		U	Y	4	TRG	N	Yes	1.29	5	AI	1.29
CJ63994	SV-3	CJ63994	N	74-87-3	Chloromethane		U	ppbv		U	Y	4	TRG	N	Yes	2.42	5	AI	2.42
CJ63994	SV-3	CJ63994	N	75-00-3	Chloroethane		U	ppbv		U	Y	4	TRG	N	Yes	1.9	5	AI	1.9
CJ63994	SV-3	CJ63994	N	75-01-4	Vinyl Chloride		U	ppbv		U	Y	4	TRG	N	Yes	0.391	5	AI	0.391
CJ63994	SV-3	CJ63994	N	75-09-2	Methylene Chloride		U	ppbv		U	Y	4	TRG	N	Yes	4.32	5	AI	4.32
CJ63994	SV-3	CJ63994	N	75-15-0	Carbon Disulfide		U	ppbv		U	Y	4	TRG	N	Yes	1.61	5	AI	1.61
CJ63994	SV-3	CJ63994	N	75-25-2	Bromoform		U	ppbv		U	Y	4	TRG	N	Yes	0.484	5	AI	0.484
CJ63994	SV-3	CJ63994	N	75-27-4	Bromodichloromethane		U	ppbv		U	Y	4	TRG	N	Yes	0.747	5	AI	0.747
CJ63994	SV-3	CJ63994	N	75-34-3	1,1-Dichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	1.24	5	AI	1.24
CJ63994	SV-3	CJ63994	N	75-35-4	1,1-Dichloroethene		U	ppbv		U	Y	4	TRG	N	Yes	0.252	5	AI	0.252
CJ63994	SV-3	CJ63994	N	75-69-4	Trichlorofluoromethane		U	ppbv		U	Y	4	TRG	N	Yes	0.891	5	AI	0.891
CJ63994	SV-3	CJ63994	N	75-71-8	Dichlorodifluoromethane		U	ppbv		U	Y	4	TRG	N	Yes	1.01	5	AI	1.01
CJ63994	SV-3	CJ63994	N	76-13-1	Trichlorotrifluoroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.653	5	AI	0.653
CJ63994	SV-3	CJ63994	N	76-14-2	1,2-Dichlorotetrafluoroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.716	5	AI	0.716
CJ63994	SV-3	CJ63994	N	78-87-5	1,2-dichloropropane		U	ppbv		U	Y	4	TRG	N	Yes	1.08	5	AI	1.08
CJ63994	SV-3	CJ63994	N	78-93-3	Methyl Ethyl Ketone	8.82	ppbv			Y	4	TRG	Y	Yes	1.7	5	AI	1.7	
CJ63994	SV-3	CJ63994	N	79-00-5	1,1,2-Trichloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.917	5	AI	0.917
CJ63994	SV-3	CJ63994	N	79-01-6	Trichloroethene	6.39	ppbv			Y	4	TRG	Y	Yes	0.186	5	AI	0.186	
CJ63994	SV-3	CJ63994	N	79-34-5	1,1,2,2-Tetrachloroethane		U	ppbv		U	Y	4	TRG	N	Yes	0.729	5	AI	0.729
CJ63994	SV-3	CJ63994	N	87-68-3	Hexachlorobutadiene		U	ppbv		U	Y	4	TRG	N	Yes	0.469	5	AI	0.469
CJ63994	SV-3	CJ63994	N	95-47-6	o-Xylene	10.1	ppbv			Y	4	TRG	Y	Yes	1.15	5	AI	1.15	
CJ63994	SV-3	CJ63994	N	95-50-1	1,2-Dichlorobenzene		U	ppbv		U	Y	4	TRG	N	Yes	0.832	5	AI	0.832
CJ63994	SV-3	CJ63994	N	95-63-6	1,2,4-Trimethylbenzene	9.61	ppbv			Y	4	TRG	Y	Yes	1.02	5	AI	1.02	
CJ63994	SV-3	CJ63994	N	98-82-8	Isopropylbenzene		U	ppbv		U	Y	4	TRG	N	Yes	1.02	5	AI	1.02
CJ63994	SV-3	CJ63994	N	99-87-6	4-Isopropyltoluene		U	ppbv		U	Y	4	TRG	N	Yes	0.911	5	AI	0.911

**SECTION 3**

**ORGANIC DATA SUPPORT DOCUMENTATION**

**A. SAMPLE DELIVERY GROUP L2244833**

## ORGANIC ANALYSIS SUPPORT DOCUMENTATION

Client Name: GZA GeoEnvironmental of New York  
 Site/Project Name: 2022 DUSR BCP Bronx  
 Job Number/Task/Subtask: PROJ-021403 Ambient/Indoor Air Report  
 Laboratory/Location: Alpha Analytical  
 SDG: L2244833  
 Sample Collection Dates: 8/18/22

EnvStd Project Manager:	STZ
Reviewed by:	JAB
Approved by:	STZ
Completion Date:	10/26/22
Validation Level:	4

The following table indicates criteria that were examined, the identified problems, and support documentation attachments.

Parameter/ Method	Criteria Examined in Detail							Problems Identified						
	Check (✓) if Yes or Footnote Letter for Comments Below													
	TO-15							TO-15						
Condition upon Receipt	X													
Sample Preservation	X													
Holding Times	X													
Blank Analysis Results	X													
Surrogates														
Laboratory Control Sample	X													
Matrix Spike/Matrix Spike Duplicate														
Laboratory Duplicate	X													
Field Duplicate														
Sample Preparation	X													
Detection Limit/Sensitivity	X													
Mass Tuning	X													
GC Instrument Performance – Resolution Checks and DDT/Endrin Breakdown														
Initial Calibrations	X													
Continuing Calibrations	X													
Internal Standard Performance	X													
Retention Time Shifts	X													
Quantitation of Results	X													
Qualitative Identification: Targets	X													X
Qualitative Identification: TICs														
Multiple Dilutions/Analyses	X													
Analytical Sequence	X													
GC Column Agreement														
Manual Integration	X													
Percent Solids														
Extract Cleanup Documentation, Checks, and Calibrations														
Deliverable was Complete	X													
Others:														

**Comments:** Qualitative Identification, Quantitation of Results, and Manual Integrations are not included in the Support Documentation unless a problem was identified.

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## BLANK ANALYSIS RESULTS FOR ORGANIC PARAMETERS

1 - V = Volatile; S = Semivolatile; P = Pesticide/PCB; O = Other:

2 - MB = Method Blank; TB = Trip Blank; EB = Equipment Blank; FB = Field Blank;  
IB = Instrument Blank; SB = Storage Blank

## Notes:

**Laboratory Control Sample Summary**  
**Form 3**  
**Air Volatiles**

Client : GZA GeoEnvironmental, Inc.                      Lab Number : L2244833  
 Project Name : 101 E 150TH ST RI                      Project Number : 41.0162951.10  
 Matrix : AIR  
 LCS Sample ID : WG1678730-3   Analysis Date : 08/23/22 14:10   File ID : r1534875  
 LCSD Sample ID :                      Analysis Date :                      File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
70-130									
Dichlorodifluoromethane	10	8.87	89				-	70-130	-
Chloromethane	10	9.09	91				-	70-130	-
Freon-114	10	9.54	95				-	70-130	-
Vinyl chloride	10	9.19	92				-	70-130	-
1,3-Butadiene	10	9.58	96				-	70-130	-
Bromomethane	10	8.96	90				-	70-130	-
Chloroethane	10	8.98	90				-	70-130	-
Ethanol	50	40.5	81				-	40-160	-
Vinyl bromide	10	8.06	81				-	70-130	-
Acetone	50	41.0	82				-	40-160	-
Trichlorofluoromethane	10	7.68	77				-	70-130	-
Isopropanol	25	19.3	77				-	40-160	-
1,1-Dichloroethene	10	9.29	93				-	70-130	-
Tertiary butyl Alcohol	10	8.01	80				-	70-130	-
Methylene chloride	10	10.0	100				-	70-130	-
3-Chloropropene	10	9.74	97				-	70-130	-
Carbon disulfide	10	9.35	94				-	70-130	-
Freon-113	10	9.85	98				-	70-130	-
trans-1,2-Dichloroethene	10	8.06	81				-	70-130	-
1,1-Dichloroethane	10	8.82	88				-	70-130	-
Methyl tert butyl ether	10	9.51	95				-	70-130	-
2-Butanone	10	9.27	93				-	70-130	-
cis-1,2-Dichloroethene	10	8.76	88				-	70-130	-
Ethyl Acetate	10	8.56	86				-	70-130	-
Chloroform	10	8.87	89				-	70-130	-
Tetrahydrofuran	10	9.54	95				-	70-130	-



**Laboratory Control Sample Summary**  
**Form 3**  
**Air Volatiles**

Client : GZA GeoEnvironmental, Inc.                      Lab Number : L2244833  
 Project Name : 101 E 150TH ST RI                      Project Number : 41.0162951.10  
 Matrix : AIR  
 LCS Sample ID : WG1678730-3    Analysis Date : 08/23/22 14:10    File ID : r1534875  
 LCSD Sample ID :                      Analysis Date :                      File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,2-Dichloroethane	10	7.44	74				-	70-130	-
n-Hexane	10	9.33	93				-	70-130	-
1,1,1-Trichloroethane	10	9.14	91				-	70-130	-
Benzene	10	10.5	105				-	70-130	-
Carbon tetrachloride	10	9.05	90				-	70-130	-
Cyclohexane	10	9.54	95				-	70-130	-
1,2-Dichloropropane	10	10.2	102				-	70-130	-
Bromodichloromethane	10	9.24	92				-	70-130	-
1,4-Dioxane	10	10.2	102				-	70-130	-
Trichloroethene	10	10.4	104				-	70-130	-
2,2,4-Trimethylpentane	10	9.55	96				-	70-130	-
Heptane	10	10.9	109				-	70-130	-
cis-1,3-Dichloropropene	10	11.5	115				-	70-130	-
4-Methyl-2-pentanone	10	10.9	109				-	70-130	-
trans-1,3-Dichloropropene	10	9.35	94				-	70-130	-
1,1,2-Trichloroethane	10	11.0	110				-	70-130	-
Toluene	10	11.2	112				-	70-130	-
2-Hexanone	10	12.0	120				-	70-130	-
Dibromochloromethane	10	11.1	111				-	70-130	-
1,2-Dibromoethane	10	11.8	118				-	70-130	-
Tetrachloroethene	10	11.3	113				-	70-130	-
Chlorobenzene	10	11.6	116				-	70-130	-
Ethylbenzene	10	11.9	119				-	70-130	-
p/m-Xylene	20	23.2	116				-	70-130	-
Bromoform	10	11.9	119				-	70-130	-
Styrene	10	12.5	125				-	70-130	-



**Laboratory Control Sample Summary**  
**Form 3**  
**Air Volatiles**

Client : GZA GeoEnvironmental, Inc.                      Lab Number : L2244833  
 Project Name : 101 E 150TH ST RI                      Project Number : 41.0162951.10  
 Matrix : AIR  
 LCS Sample ID : WG1678730-3   Analysis Date : 08/23/22 14:10   File ID : r1534875  
 LCSD Sample ID :                      Analysis Date :                      File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,1,2,2-Tetrachloroethane	10	11.2	112				-	70-130	-
o-Xylene	10	11.8	118				-	70-130	-
4-Ethyltoluene	10	11.3	113				-	70-130	-
1,3,5-Trimethylbenzene	10	12.0	120				-	70-130	-
1,2,4-Trimethylbenzene	10	12.0	120				-	70-130	-
Benzyl chloride	10	9.17	92				-	70-130	-
1,3-Dichlorobenzene	10	11.4	114				-	70-130	-
1,4-Dichlorobenzene	10	11.3	113				-	70-130	-
1,2-Dichlorobenzene	10	11.4	114				-	70-130	-
1,2,4-Trichlorobenzene	10	10.1	101				-	70-130	-
Hexachlorobutadiene	10	10.5	105				-	70-130	-



**Method Blank Summary**  
**Form 4**  
**Air Volatiles**

Client : GZA GeoEnvironmental, Inc. Lab Number : L2244833  
Project Name : 101 E 150TH ST RI Project Number : 41.0162951.10  
Lab Sample ID : WG1678730-4 Lab File ID : r1534877  
Instrument ID : AIRLAB15 ✓  
Matrix : AIR Analysis Date : 08/23/22 17:30

Client Sample No.	Lab Sample ID	Analysis Date
WG1678730-3LCS	WG1678730-3	08/23/22 14:10
AA-03	L2244833-07D	08/23/22 18:49
SV-17	L2244833-01D	08/23/22 19:25
SV-24	L2244833-02	08/23/22 20:05
SV-25	L2244833-03D	08/23/22 20:45
SV-18	L2244833-04D	08/23/22 21:21
SV-19	L2244833-05D	08/23/22 21:59
SV-28	L2244833-06D	08/23/22 22:35
SV-3DUP	WG1678730-5	08/24/22 02:31
SV-24	L2244833-02D	08/24/22 07:41
SV-25	L2244833-03D2	08/24/22 08:17
SV-19	L2244833-05D2	08/24/22 08:53
SV-17	L2244833-01D2	08/24/22 10:40



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: WG1678730-4	Date Collected	: NA
Client ID	: WG1678730-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/23/22 17:30
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534877	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	ND	1.00	--	ND	2.38	--	U
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: WG1678730-4	Date Collected	: NA
Client ID	: WG1678730-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/23/22 17:30
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534877	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethylene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: WG1678730-4	Date Collected	: NA
Client ID	: WG1678730-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/23/22 17:30
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534877	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



**Instrument Performance Check (Tune) Summary**  
**Form 5**  
**Air Volatiles**  
**Bromofluorobenzene (BFB)**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Instrument ID	: AIRLAB15	Analysis Date	: 08/07/22 17:05
Tune Standard	: WG1672550-1	Tune File ID	: r1534557_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	17.5
75	30.0 - 66.0% of mass 95	37.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4 (.7 )1
174	50.0 - 120.0% of mass 95	64.6
175	4.0 - 9.0% of mass 174	4.6 (7.1 )1
176	93.0 - 101% of mass 174	62.5 (96.8)1
177	5.0 - 9.0% of mass 176	4.1 (6.5 )2

1-Value is % of mass 174    2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.2	R1595661-1	R1534561	08/07/22 19:33
STD0.5	R1595661-2	R1534562	08/07/22 20:12
STD1.0	R1595661-3	R1534563	08/07/22 20:53
STD5.0	R1595661-4	R1534564	08/07/22 21:32
STD010	R1595661-5	R1534565	08/07/22 22:14
STD020	R1595661-6	R1534566	08/07/22 22:52
STD050	R1595661-7	R1534567	08/07/22 23:32
STD100	R1595661-8	R1534568	08/08/22 00:13
ICV QUANT	R1595661-9	R1534571	08/08/22 11:14

**Initial Calibration Summary**  
**Form 6**  
**Air Volatiles**

**Client** : GZA GeoEnvironmental, Inc.  
**Project Name** : 101 E 150TH ST RI  
**Instrument ID** : AIRLAB15  
**Calibration dates** : 08/07/22 19:33    08/08/22 00:13

**Lab Number** : L2244833  
**Project Number** : 41.0162951.10  
**Ical Ref** : ICAL19226

Calibration Files

0.2 =r1534561.D 0.5 =r1534562.D 1.0 =r1534563.D 5.0 =r1534564.D 10 =r1534565.D 20 =r1534566.D  
50 =r1534567.D 100 =r1534568.D

Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
----------	-----	-----	-----	-----	----	----	----	-----	-----	------

1) I	bromochloromethane	-----ISTD-----								
2)	chlorodifluoromethane	0.821	0.780	0.747	0.744	0.688	0.674	0.655	0.622	0.7165
3)	propylene	0.417	0.424	0.413	0.407	0.412	0.414	0.418	0.4150	1.28
4)	propane	0.772	0.733	0.706	0.675	0.663	0.644	0.605	0.6854	8.21
5)	dichlorodifluoromethane	0.847	0.813	0.794	0.832	0.669	0.672	0.616	0.571	0.7269
6) C	chloromethane	0.458	0.441	0.415	0.423	0.383	0.377	0.372	0.361	0.4036
7)	Freon-114	1.072	1.023	0.989	1.007	0.895	0.858	0.808	0.747	0.9249
8) C	methanol	0.310	0.272	0.252	0.247	0.236	0.218	0.2560	0.2560	12.44
9) C	v vinyl chloride	0.628	0.577	0.562	0.578	0.549	0.520	0.514	0.492	0.5526
10) C	1,3-butadiene	0.477	0.448	0.425	0.426	0.404	0.384	0.369	0.352	0.4108
11)	butane	0.860	0.822	0.788	0.768	0.751	0.750	0.749	0.751	0.7799
12) C	acetaldehyde	0.301	0.288	0.269	0.239	0.231	0.212	0.184	0.2464	17.08
13) C	bromomethane	0.479	0.438	0.424	0.426	0.412	0.373	0.361	0.337	0.4063
14) C	chloroethane	0.300	0.282	0.270	0.279	0.270	0.257	0.257	0.251	0.2709
15)	ethanol	0.529	0.453	0.442	0.419	0.366	0.321	0.4218	0.4218	17.18
16)	dichlorofluoromethane	0.965	0.932	0.894	0.876	0.857	0.825	0.840	0.840	0.8788
17) C	v vinyl bromide	0.401	0.388	0.374	0.370	0.362	0.357	0.355	0.342	0.3685
18) C	acrolein	0.262	0.248	0.232	0.232	0.221	0.218	0.207	0.2316	8.11
19)	acetone	0.640	0.600	0.574	0.545	0.537	0.534	0.517	0.488	0.5543
20) C	acetonitrile	0.496	0.479	0.475	0.490	0.474	0.481	0.489	0.483	0.4835
21)	trichlorofluoromethane	0.723	0.682	0.658	0.660	0.640	0.592	0.570	0.539	0.6330
22)	isopropyl alcohol	0.822	0.718	0.707	0.659	0.661	0.683	0.671	0.647	0.6960
23) C	acrylonitrile	0.459	0.414	0.390	0.390	0.394	0.392	0.381	0.362	0.3976
24)	pentane	1.027	0.912	0.941	0.903	0.885	0.893	0.906	0.877	0.9180
25)	ethyl ether	1.073	1.037	0.981	1.145	1.193	1.155	1.091	0.993	1.0834
26) C	1,1-dichloroethene	0.833	0.783	0.723	0.777	0.735	0.783	0.660	0.640	0.7418
27)	tertiary butyl alcohol	0.938	0.923	0.900	0.904	0.995	1.013	0.992	0.9521	4.91
28) C	methylene chloride	0.654	0.620	0.617	0.614	0.600	0.574	0.537	0.6024	6.19
29) C	3-chloropropene	0.730	0.695	0.689	0.680	0.689	0.714	0.728	0.723	0.7061
30) C	carbon disulfide	1.163	1.121	1.127	1.236	1.265	1.322	1.295	1.245	1.2217
31)	Freon 113	0.796	0.773	0.736	0.742	0.742	0.754	0.767	0.754	0.7580
32)	trans-1,2-dichloroethene	0.815	0.780	0.771	0.780	0.784	0.818	0.830	0.813	0.7988
33) C	1,1-dichloroethane	0.963	0.920	0.893	0.914	0.921	0.939	0.953	0.951	0.9320
34) C	MTBE	1.073	1.048	1.025	1.044	1.050	1.076	1.045	1.028	1.0486
35) C	v vinyl acetate	1.066	0.958	0.857	0.919	0.973	1.049	1.074	1.068	0.9955
36) C	2-butanone	1.065	1.032	1.034	1.027	1.050	1.051	1.030	1.0412	1.35

**Initial Calibration Summary**  
**Form 6**  
**Air Volatiles**

<b>Client</b>	: GZA GeoEnvironmental, Inc.	<b>Lab Number</b>	: L2244833
<b>Project Name</b>	: 101 E 150TH ST RI	<b>Project Number</b>	: 41.0162951.10
<b>Instrument ID</b>	: AIRLAB15	<b>Ical Ref</b>	: ICAL19226
<b>Calibration dates</b>	: 08/07/22 19:33    08/08/22 00:13		

Calibration Files

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50 =r1534567.D 100 =r1534568.D
```

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)	cis-1,2-dichloroethene	0.737	0.714	0.683	0.711	0.711	0.735	0.739	0.732	0.7203	2.67
38)	Ethyl Acetate		0.202	0.184	0.188	0.188	0.208	0.220	0.217	0.2010	7.35
39) C	chloroform	0.885	0.841	0.815	0.838	0.831	0.816	0.738	0.672	0.8047	8.38
40)	Tetrahydrofuran		0.682	0.617	0.632	0.638	0.667	0.675	0.674	0.6550	3.89
41)	2,2-dichloropropane	0.615	0.608	0.583	0.584	0.593	0.604	0.554	0.525	0.5831	5.16
42) C	1,2-dichloroethane	0.686	0.598	0.557	0.551	0.544	0.544	0.523	0.508	0.5641	9.92
43) I	1,4-difluorobenzene										
44) C	hexane	0.504	0.490	0.486	0.482	0.490	0.507	0.482	0.425	0.4833	5.23
45)	diisopropyl ether	0.211	0.220	0.216	0.218	0.218	0.228	0.216	0.195	0.2152	4.36
46)	tert-butyl ethyl ether	0.797	0.786	0.783	0.799	0.809	0.848	0.835	0.793	0.8064	2.92
47) s	1,2-dichloroethane-D4	0.401	0.398	0.397	0.390	0.392	0.394	0.383	0.385	0.3924	1.58
48) C	1,1,1-trichloroethane	0.298	0.284	0.280	0.290	0.293	0.298	0.286	0.277	0.2883	2.73
49)	1,1-dichloropropene	0.314	0.310	0.299	0.304	0.306	0.313	0.299	0.284	0.3036	3.21
50) C	benzene	0.752	0.720	0.703	0.722	0.722	0.716	0.684	0.638	0.7069	4.80
51)	thiophene	0.494	0.487	0.473	0.486	0.493	0.485	0.456	0.424	0.4750	5.03
52) C	carbon tetrachloride	0.224	0.221	0.219	0.240	0.247	0.246	0.227	0.209	0.2290	5.96
53)	cyclohexane	0.520	0.512	0.498	0.507	0.515	0.533	0.518	0.489	0.5115	2.71
54)	tert-amyl methyl ether	0.557	0.540	0.526	0.540	0.555	0.573	0.566	0.555	0.5515	2.79
55)	dibromomethane	0.250	0.233	0.224	0.225	0.227	0.239	0.235	0.217	0.2312	4.38
56) C	1,2-dichloropropane	0.298	0.283	0.275	0.282	0.286	0.296	0.305	0.299	0.2903	3.58
57)	bromodichloromethane	0.343	0.346	0.348	0.380	0.395	0.403	0.374	0.344	0.3666	6.69
58) C	1,4-dioxane	0.173	0.172	0.173	0.179	0.182	0.190	0.188	0.173	0.1787	4.08
59) C	trichloroethene	0.284	0.273	0.266	0.278	0.280	0.286	0.279	0.257	0.2754	3.60
60) C	2,2,4-trimethylpentane	1.715	1.627	1.580	1.586	1.593	1.649	1.599	1.441	1.5988	4.86
61)	methyl methacrylate		0.292	0.287	0.293	0.299	0.318	0.317	0.313	0.3026	4.34
62)	heptane	0.520	0.505	0.499	0.505	0.505	0.516	0.501	0.482	0.5041	2.28
63) C	cis-1,3-dichloropropene	0.302	0.298	0.301	0.325	0.337	0.343	0.332	0.322	0.3198	5.54
64) C	4-methyl-2-pentanone		0.552	0.551	0.576	0.579	0.590	0.578	0.559	0.5694	2.66
65)	trans-1,3-dichloropropene	0.271	0.263	0.264	0.297	0.307	0.310	0.303	0.293	0.2884	6.78
66) C	1,1,2-trichloroethane	0.268	0.255	0.245	0.252	0.256	0.265	0.272	0.266	0.2599	3.57
67) I	chlorobenzene-D5										
68) C	toluene	3.702	3.656	3.524	3.659	3.674	3.841	3.761	3.557	3.6716	2.78
69) s	toluene-D8	4.815	4.846	4.785	4.701	4.695	5.071	5.320	5.671	4.9879	6.96
70)	2-methylthiophene	2.951	2.880	2.782	2.804	2.797	2.931	2.958	2.944	2.8809	2.63
71)	1,3-dichloropropane	1.726	1.646	1.594	1.598	1.577	1.655	1.602	1.566	1.6204	3.25
72)	2-hexanone	2.147	2.082	2.135	2.262	2.265	2.388	2.365	2.355	2.2499	5.20



**Initial Calibration Summary**  
**Form 6**  
**Air Volatiles**

<b>Client</b>	: GZA GeoEnvironmental, Inc.	<b>Lab Number</b>	: L2244833
<b>Project Name</b>	: 101 E 150TH ST RI	<b>Project Number</b>	: 41.0162951.10
<b>Instrument ID</b>	: AIRLAB15	<b>Ical Ref</b>	: ICAL19226
<b>Calibration dates</b>	: 08/07/22 19:33    08/08/22 00:13		

Calibration Files

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```

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)	3-methylthiophene	2.991	2.927	2.857	2.872	2.877	2.998	3.005	2.968	2.9369	2.10
74)	dibromochloromethane	1.077	1.101	1.115	1.333	1.411	1.545	1.502	1.428	1.3140	14.47
75) C	1,2-dibromoethane	1.455	1.390	1.406	1.468	1.472	1.534	1.526	1.529	1.4726	3.74
76)	butyl acetate	0.342	0.347	0.377	0.380	0.415	0.421	0.438	0.3886	0.3886	9.60
77)	octane	1.522	1.493	1.470	1.460	1.463	1.530	1.483	1.404	1.4782	2.69
78) C	tetrachloroethene	1.380	1.277	1.289	1.313	1.287	1.324	1.284	1.236	1.2987	3.21
79)	1,1,1,2-tetrachloroethane	1.101	1.059	1.025	1.098	1.116	1.208	1.174	1.068	1.1063	5.44
80) C	chlorobenzene	2.608	2.543	2.508	2.566	2.518	2.588	2.527	2.425	2.5353	2.24
81) C	ethylbenzene	4.492	4.433	4.318	4.579	4.565	4.867	4.734	4.436	4.5530	3.89
82)	2-ethylthiophene	3.457	3.464	3.330	3.225	3.225	3.372	3.361	3.310	3.3430	2.72
83) C	m+p-xylene	3.656	3.595	3.542	3.732	3.691	3.862	3.690	3.278	3.6309	4.71
84) C	bromoform	0.668	0.755	0.806	1.048	1.149	1.281	1.286	1.252	1.0306	24.57
85) C	styrene	2.482	2.478	2.439	2.596	2.598	2.740	2.751	2.773	2.6071	5.16
86) C	1,1,2,2-tetrachloroethane	2.869	2.826	2.771	2.860	2.823	2.822	2.648	2.327	2.7431	6.64
87) C	o-xylene	3.705	3.665	3.593	3.772	3.711	3.857	3.589	3.035	3.6159	6.94
88)	1,2,3-trichloropropane	2.036	2.035	1.999	2.002	1.945	2.044	2.009	1.959	2.0038	1.80
89)	nonane	3.385	3.257	3.181	3.251	3.187	3.331	3.280	3.183	3.2571	2.28
90) s	bromofluorobenzene	2.899	3.005	2.981	2.945	2.894	3.215	3.452	3.776	3.1459	10.10
91) C	isopropylbenzene	4.383	4.269	4.277	4.271	4.219	4.432	4.356	4.240	4.3060	1.75
92)	bromobenzene	2.714	2.717	2.632	2.645	2.595	2.702	2.640	2.535	2.6474	2.39
93)	2-chlorotoluene	1.361	1.323	1.278	1.325	1.359	1.463	1.441	1.374	1.3654	4.51
94)	n-propylbenzene	1.515	1.569	1.505	1.553	1.554	1.637	1.600	1.532	1.5581	2.82
95)	4-chlorotoluene	1.278	1.308	1.302	1.332	1.308	1.416	1.411	1.373	1.3409	3.92
96)	4-ethyl toluene	4.463	4.532	4.485	4.565	4.529	4.716	4.677	4.474	4.5551	2.07
97)	1,3,5-trimethylbenzene	3.830	3.770	3.773	3.850	3.796	3.901	3.880	3.701	3.8127	1.72
98)	tert-butylbenzene	4.676	4.619	4.508	4.567	4.419	4.316	3.932	3.435	4.3092	9.82
99)	1,2,4-trimethylbenzene	3.892	3.839	3.780	3.910	3.812	3.812	3.757	3.202	3.7505	6.07
100)	decane	4.386	4.396	4.361	4.534	4.570	4.851	4.632	3.921	4.4564	6.06
101) C	Benzyl Chloride	1.784	1.808	1.918	2.437	2.601	3.123	3.319	3.026	2.5019	24.73
102)	1,3-dichlorobenzene	2.412	2.417	2.364	2.491	2.416	2.563	2.570	2.413	2.4557	3.12
103) C	1,4-dichlorobenzene	2.363	2.413	2.369	2.441	2.426	2.498	2.542	2.480	2.4416	2.55
104)	sec-butylbenzene	5.629	5.638	5.543	5.658	5.501	5.730	5.655	5.253	5.5760	2.66
105)	1,2,3-trimethylbenzene	3.465	3.462	3.372	3.344	3.315	3.490	3.453	2.961	3.3576	5.14
106)	p-isopropyltoluene	5.525	5.449	5.461	5.471	5.226	5.163	4.787	4.036	5.1397	9.89
107)	1,2-dichlorobenzene	2.183	2.221	2.251	2.289	2.253	2.358	2.426	2.380	2.2954	3.68
108)	n-butylbenzene	4.759	4.887	4.893	5.075	5.126	5.346	5.212	4.551	4.9810	5.19



**Initial Calibration Summary**  
**Form 6**  
**Air Volatiles**

<b>Client</b>	: GZA GeoEnvironmental, Inc.	<b>Lab Number</b>	: L2244833
<b>Project Name</b>	: 101 E 150TH ST RI	<b>Project Number</b>	: 41.0162951.10
<b>Instrument ID</b>	: AIRLAB15	<b>Ical Ref</b>	: ICAL19226
<b>Calibration dates</b>	: 08/07/22 19:33    08/08/22 00:13		

Calibration Files

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```

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)	indan	4.007	4.068	4.017	3.941	3.825	3.995	3.835	3.575	3.9080	4.10
110)	indene	2.864	2.974	3.022	2.992	2.897	3.094	3.103	2.974	2.9902	2.81
111) C	1,2-dibromo-3-chloropropane	0.736	0.804	0.871	1.009	0.997	1.070	1.086	1.072	0.9557	14.08
112)	undecane	4.446	4.832	4.846	5.145	5.212	5.472	5.099	4.229	4.9100	8.39
113)	1,2,4,5-tetramethylbenzene	6.954	7.733	7.744	7.320	7.002	7.407	6.768	5.879	7.1010	8.57
114)	dodecane	3.673	4.694	5.011	5.519	5.586	5.813	5.290	4.309	4.9870	14.56
115) C	1,2,4-trichlorobenzene	1.170	1.458	1.503	1.712	1.791	1.863	1.925	1.890	1.6640	15.90
116)	naphthalene	4.440	5.304	5.556	5.862	5.953	6.180	5.996	5.504	5.5992	9.85
117)	1,2,3-trichlorobenzene	1.164	1.553	1.670	1.852	1.866	1.977	2.015	1.940	1.7547	16.26
118)	benzothiophene	0.828	0.922	1.391	1.429	1.172	1.073	0.893	1.1010	21.85	
119) C	hexachlorobutadiene	1.106	1.406	1.419	1.511	1.425	1.473	1.457	1.349	1.3932	9.02
120)	2-methylnaphthalene					1.086	1.190	1.261	1.556	1.804	1.888
121)	1-methylnaphthalene					2.083	2.219	2.283	2.667	3.010	2.951
										2.5356	15.62

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\08\0807T\_I\  
 Data File : r1534571.D  
 Acq On : 8 Aug 2022 11:14 AM  
 Operator : AIRLAB15:RY  
 Sample : CTO15-LLSTD10  
 Misc : WG1672550  
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Aug 08 11:57:46 2022  
 Quant Method : O:\Forensics\Data\Airlab15\2022\08\0807T\_I\TFS15\_220807.M  
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis  
 QLast Update : Mon Aug 08 09:27:24 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min  
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	94	0.00
2	chlorodifluoromethane	0.716	0.610	14.8	84	0.00
3	propylene	0.415	0.443	-6.7	102	0.00
4	propane	0.685	0.606	11.5	85	0.00
5	dichlorodifluoromethane	0.727	0.662	8.9	93	0.00
6 C	chloromethane	0.404	0.381	5.7	94	0.00
7	Freon-114	0.925	0.904	2.3	95	0.00
8 C	methanol	0.256	0.219	14.5	82	0.00
9 C	vinyl chloride	0.553	0.539	2.5	92	0.00
10 C	1,3-butadiene	0.411	0.399	2.9	93	0.00
11	butane	0.780	0.729	6.5	91	0.00
13 C	bromomethane	0.406	0.388	4.4	89	0.00
14 C	chloroethane	0.271	0.270	0.4	94	0.00
15	ethanol	0.422	0.368	12.8	78	0.00
16	dichlorofluoromethane	0.879	0.791	10.0	87	0.00
17 C	vinyl bromide	0.369	0.363	1.6	94	0.00
18 C	acrolein	0.232	0.202	12.9	82	0.00
19	acetone	0.554	0.576	-4.0	101	0.00
20 C	acetonitrile	0.483	0.460	4.8	91	0.00
21	trichlorofluoromethane	0.633	0.626	1.1	92	0.00
22	isopropyl alcohol	0.696	0.680	2.3	97	0.00
23 C	acrylonitrile	0.398	0.374	6.0	89	0.00
24	pentane	0.918	0.875	4.7	93	0.00
25	ethyl ether	1.083	1.037	4.2	82	0.00
26 C	1,1-dichloroethene	0.742	0.708	4.6	91	0.01
27	tertiary butyl alcohol	0.952	0.844	11.3	88	0.00
28 C	methylene chloride	0.602	0.486	19.3	74	0.00
29 C	3-chloropropene	0.706	0.773	-9.5	106	0.00
30 C	carbon disulfide	1.222	1.250	-2.3	93	0.00
31	Freon 113	0.758	0.813	-7.3	103	0.00
32	trans-1,2-dichloroethene	0.799	0.811	-1.5	97	0.00
33 C	1,1-dichloroethane	0.932	0.976	-4.7	100	0.00
34 C	MTBE	1.049	1.122	-7.0	101	0.00
35 C	vinyl acetate	0.995	0.933	6.2	90	0.00
36 C	2-butanone	1.041	1.025	1.5	94	0.00
37	cis-1,2-dichloroethene	0.720	0.770	-6.9	102	0.00
38	Ethyl Acetate	0.201	0.206	-2.5	103	0.00
39 C	chloroform	0.805	0.847	-5.2	96	0.00
40	Tetrahydrofuran	0.655	0.639	2.4	94	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\08\0807T\_I\  
 Data File : r1534571.D  
 Acq On : 8 Aug 2022 11:14 AM  
 Operator : AIRLAB15:RY  
 Sample : CTO15-LLSTD10  
 Misc : WG1672550  
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Aug 08 11:57:46 2022  
 Quant Method : O:\Forensics\Data\Airlab15\2022\08\0807T\_I\TFS15\_220807.M  
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis  
 QLast Update : Mon Aug 08 09:27:24 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min  
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	0.583	0.562	3.6	89	0.00
42 C	1,2-dichloroethane	0.564	0.555	1.6	96	0.00
43 I	1,4-difluorobenzene	1.000	1.000	0.0	99	0.00
44 C	hexane	0.483	0.490	-1.4	99	0.00
45	diisopropyl ether	0.215	0.209	2.8	95	0.02
46	tert-butyl ethyl ether	0.806	0.779	3.3	96	0.00
47 s	1,2-dichloroethane-D4	0.392	0.394	-0.5	100	0.00
48 C	1,1,1-trichloroethane	0.288	0.305	-5.9	103	0.01
49	1,1-dichloropropene	0.304	0.294	3.3	96	0.00
50 C	benzene	0.707	0.693	2.0	95	0.00
52 C	carbon tetrachloride	0.229	0.249	-8.7	100	0.00
53	cyclohexane	0.512	0.518	-1.2	100	0.00
54	tert-amyl methyl ether	0.551	0.535	2.9	96	0.00
55	dibromomethane	0.231	0.223	3.5	97	0.00
56 C	1,2-dichloropropane	0.290	0.294	-1.4	102	0.00
57	bromodichloromethane	0.367	0.388	-5.7	98	0.00
58 C	1,4-dioxane	0.179	0.166	7.3	91	0.00
59 C	trichloroethene	0.275	0.285	-3.6	101	0.01
60 C	2,2,4-trimethylpentane	1.599	1.620	-1.3	101	0.00
61	methyl methacrylate	0.303	0.312	-3.0	104	0.01
62	heptane	0.504	0.504	0.0	99	0.00
63 C	cis-1,3-dichloropropene	0.320	0.343	-7.2	101	0.00
64 C	4-methyl-2-pentanone	0.569	0.563	1.1	96	0.00
65	trans-1,3-dichloropropene	0.288	0.264	8.3	85	0.00
66 C	1,1,2-trichloroethane	0.260	0.266	-2.3	103	0.00
67 I	chlorobenzene-D5	1.000	1.000	0.0	96	0.00
68 C	toluene	3.672	3.830	-4.3	100	0.00
69 s	toluene-D8	4.988	5.126	-2.8	105	0.00
71	1,3-dichloropropane	1.620	1.501	7.3	91	0.00
72	2-hexanone	2.250	2.158	4.1	91	0.00
74	dibromochloromethane	1.314	1.533	-16.7	104	0.00
75 C	1,2-dibromoethane	1.473	1.465	0.5	95	0.00
76	butyl acetate	0.389	0.365	6.2	92	0.00
77	octane	1.478	1.411	4.5	92	0.00
78 C	tetrachloroethene	1.299	1.369	-5.4	102	0.00
79	1,1,1,2-tetrachloroethane	1.106	1.154	-4.3	99	0.00
80 C	chlorobenzene	2.535	2.566	-1.2	98	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\08\0807T\_I\  
 Data File : r1534571.D  
 Acq On : 8 Aug 2022 11:14 AM  
 Operator : AIRLAB15:RY  
 Sample : CTO15-LLSTD10  
 Misc : WG1672550  
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Aug 08 11:57:46 2022  
 Quant Method : O:\Forensics\Data\Airlab15\2022\08\0807T\_I\TFS15\_220807.M  
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis  
 QLast Update : Mon Aug 08 09:27:24 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min  
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81 C	ethylbenzene	4.553	4.859	-6.7	102	0.00
83 C	m+p-xylene	3.631	3.863	-6.4	100	0.00
84 C	bromoform	1.031	1.183	-14.7	99	0.00
85 C	styrene	2.607	2.624	-0.7	97	0.00
86 C	1,1,2,2-tetrachloroethane	2.743	2.672	2.6	91	0.00
87 C	o-xylene	3.616	3.910	-8.1	101	0.00
88	1,2,3-trichloropropane	2.004	1.865	6.9	92	0.00
89	nonane	3.257	3.014	7.5	91	0.00
90 S	bromofluorobenzene	3.146	3.563	-13.3	118	0.00
91 C	isopropylbenzene	4.306	4.401	-2.2	100	0.00
92	bromobenzene	2.647	2.493	5.8	92	0.00
93	2-chlorotoluene	1.365	1.349	1.2	95	0.00
94	n-propylbenzene	1.558	1.524	2.2	94	0.00
95	4-chlorotoluene	1.341	1.309	2.4	96	0.00
96	4-ethyl toluene	4.555	4.401	3.4	93	0.00
97	1,3,5-trimethylbenzene	3.813	3.785	0.7	95	0.00
98	tert-butylbenzene	4.309	4.327	-0.4	94	0.00
99	1,2,4-trimethylbenzene	3.750	3.831	-2.2	96	0.00
100	decane	4.456	4.480	-0.5	94	0.00
101 C	Benzyl Chloride	2.502	2.260	9.7	83	0.00
102	1,3-dichlorobenzene	2.456	2.361	3.9	94	0.00
103 C	1,4-dichlorobenzene	2.442	2.322	4.9	92	0.00
104	sec-butylbenzene	5.576	5.525	0.9	96	0.00
106	p-isopropyltoluene	5.140	4.871	5.2	89	0.00
107	1,2-dichlorobenzene	2.295	2.147	6.4	91	0.00
108	n-butylbenzene	4.981	5.195	-4.3	97	0.00
111 C	1,2-dibromo-3-chloropropane	0.956	0.956	0.0	92	0.00
112	undecane	4.910	5.041	-2.7	93	0.00
114	dodecane	4.987	5.096	-2.2	87	0.00
115 C	1,2,4-trichlorobenzene	1.664	1.191	28.4	64	0.00
116	naphthalene	5.599	5.487	2.0	88	0.00
117	1,2,3-trichlorobenzene	1.755	1.685	4.0	86	0.00
119 C	hexachlorobutadiene	1.393	1.050	24.6	71	0.00

\* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 0

# Alpha Analytical Air Lab

## Instrument Run Log

ID: Airlab15  
 Date: 08/06/22  
 Initials: JB

Internal Standard/Surrogate IDs: SS20-028 / SS21-026  
 Internal Standard/Surrogate Volume: 100 ml  
 Sequence File Name: 220806.S

SIM ICAL# 19131

Full Scan ICAL# 19130

APH ICAL#  
19132

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Pass? Y/N
1	BA15080702	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534555.qgd	250 ML			NA
1	BA15080703	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534556.qgd	250 ML			NA
1	TA15080701	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534557.qgd	250 ML	TUNE		NA
5	ITO15-SIMSTD0.02	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534558.qgd	SS22-012D 50ML		DEFAULT	NA
5	ITO15-SIMSTD0.05	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534559.qgd	SS22-012D 100ML		DEFAULT	NA
5	ITO15-SIMSTD0.1	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534560.qgd	SS22-012D 250ML		DEFAULT	NA
6	ITO15-SIMSTD0.2	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534561.qgd	SS22-012C 50ML		DEFAULT	NA
6	ITO15-SIMSTD0.5	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534562.qgd	SS22-012C 125ML		DEFAULT	NA
6	ITO15-SIMSTD1.0	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534563.qgd	SS22-012C 250ML		DEFAULT	NA
7	ITO15-SIMSTD5.0	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534564.qgd	SS22-012B 125ML		DEFAULT	NA
7	ITO15-SIMSTD010	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534565.qgd	SS22-012B 250ML		DEFAULT	NA
8	ITO15-SIMSTD020	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534566.qgd	SS22-012A 50ML		DEFAULT	NA
8	ITO15-SIMSTD050	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534567.qgd	SS22-012A 125ML		DEFAULT	NA
8	ITO15-LLSTD100	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534568.qgd	SS22-012A 250ML		DEFAULT	NA
1	BA15080702	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534569.qgd	250 ML			NA
1	BA15080703	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534570.qgd	250 ML			NA
2	CTO15-LLSTD10	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534571.qgd	SS22-015B 250ML	LL ICV/ APH ICV		NA
2	CTO15-SIMSTD5.0	C:\GCMSsolution\Methods\TO15_SFS.qgm	R1534572.qgd	SS22-015B 125ML	SIM ICV		NA

# **Alpha Analytical Air Lab**

## **Instrument Run Log**

**Date(s) of Initial Calibration:** Refer to Initial Calibration Summary Form 6

**Date Acquired:** see Instrument Performance Check Summary and/or quantitation report.

**Sample ID information:** L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume (mL)

**Dilution Factor:** See Form 1 report, or divide nominal volume by actual volume analyzed

**Instrument Performance Check (Tune) Summary**  
**Form 5**  
**Air Volatiles**  
**Bromofluorobenzene (BFB)**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Instrument ID	: AIRLAB15	Analysis Date	: 08/20/22 19:13
Tune Standard	: WG1678536-1	Tune File ID	: r1534837_tune



m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	19.2
75	30.0 - 66.0% of mass 95	44
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4 (.6 )1
174	50.0 - 120.0% of mass 95	61.9
175	4.0 - 9.0% of mass 174	4.3 (6.9 )1
176	93.0 - 101% of mass 174	60.2 (97.3)1
177	5.0 - 9.0% of mass 176	3.9 (6.5 )2

1-Value is % of mass 174    2-Value is % of mass 176



This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.2	R1601333-1	R1534841	08/20/22 21:43
STD0.5	R1601333-2	R1534842	08/20/22 22:22
STD1.0	R1601333-3	R1534843	08/20/22 23:03
STD5.0	R1601333-4	R1534844	08/20/22 23:42
STD010	R1601333-5	R1534845	08/21/22 00:23
STD020	R1601333-6	R1534846	08/21/22 01:01
STD050	R1601333-7	R1534847	08/21/22 01:40
STD100	R1601333-8	R1534848	08/21/22 02:22
ICV QUANT	R1601333-9	R1534851	08/21/22 11:33



**Initial Calibration Summary**  
**Form 6**  
**Air Volatiles**

<b>Client</b>	<b>: GZA GeoEnvironmental, Inc.</b>	<b>Lab Number</b>	<b>: L2244833</b>
<b>Project Name</b>	<b>: 101 E 150TH ST RI</b>	<b>Project Number</b>	<b>: 41.0162951.10</b>
<b>Instrument ID</b>	<b>: AIRLAB15</b>	<b>Ical Ref</b>	<b>: ICAL19277</b>
<b>Calibration dates</b>	<b>: 08/20/22 21:43    08/21/22 02:22</b>		

Calibration Files

```
0.2 =r1534841.D 0.5 =r1534842.D 1.0 =r1534843.D 5.0 =r1534844.D 10 =r1534845.D 20 =r1534846.D
50 =r1534847.D 100 =r1534848.D
```

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1) I	bromochloromethane				-----ISTD-----						
2)	chlorodifluoromethane	0.675	0.708	0.710	0.678	0.699	0.749	0.560	0.571	0.6688	10.12
3)	propylene	0.441	0.450	0.398	0.441	0.373	0.275	0.280	0.3797	19.75	
4)	propane	0.571	0.504	0.470	0.503	0.581	0.454	0.475	0.5082	9.75	
5)	dichlorodifluoromethane	0.797	0.831	0.835	0.812	0.796	0.742	0.541	0.518	0.7340	17.69
6) C	chloromethane	0.446	0.469	0.455	0.437	0.449	0.407	0.288	0.288	0.4048	18.32
7)	Freon-114	0.957	0.966	0.952	0.933	0.939	0.905	0.615	0.571	0.8548	19.07
8) C	methanol				0.487	0.202	0.206	0.217	0.162	0.159	0.2388
9) C	vinyl chloride	0.401	0.430	0.428	0.413	0.416	0.426	0.328	0.333	0.3969	51.97#
10) C	1,3-butadiene	0.365	0.366	0.369	0.347	0.357	0.396	0.277	0.264	0.3426	13.63
11)	butane	0.835	0.874	0.875	0.821	0.810	0.754	0.531	0.544	0.7556	18.54
12) C	acetaldehyde				0.299	0.305	0.267	0.268	0.251	0.172	0.157
13) C	bromomethane	0.335	0.342	0.345	0.327	0.324	0.326	0.249	0.245	0.3116	13.01
14) C	chloroethane	0.203	0.209	0.210	0.203	0.200	0.199	0.161	0.166	0.1940	9.91
15)	ethanol				0.447	0.384	0.369	0.354	0.283	0.256	0.3487
16)	dichlorofluoromethane	0.849	0.885	0.871	0.823	0.804	0.779	0.583	0.584	0.7724	15.71
17) C	vinyl bromide	0.339	0.348	0.360	0.331	0.327	0.337	0.238	0.233	0.3141	15.79
18) C	acrolein				0.215	0.205	0.193	0.195	0.187	0.152	0.147
19)	acetone	0.704	0.694	0.784	0.639	0.627	0.603	0.402	0.399	0.6065	22.89
20) C	acetonitrile				0.521	0.497	0.467	0.429	0.419	0.414	0.323
21)	trichlorofluoromethane	0.681	0.721	0.777	0.692	0.679	0.663	0.461	0.478	0.6440	17.60
22)	isopropyl alcohol	0.984	0.895	0.930	0.771	0.758	0.755	0.552	0.501	0.7684	22.37
23) C	acrylonitrile	0.395	0.398	0.386	0.375	0.381	0.384	0.317	0.285	0.3651	11.28
24)	pentane	0.981	0.955	0.911	0.913	0.893	0.893	0.697	0.672	0.8644	13.34
25)	ethyl ether	0.813	0.819	0.812	0.780	0.769	0.924	0.803	0.745	0.8081	6.62
26) C	1,1-dichloroethene	0.596	0.625	0.623	0.725	0.717	0.698	0.516	0.500	0.6251	13.84
27)	tertiary butyl alcohol				0.759	0.739	0.749	0.755	0.759	0.601	0.652
28) C	methylene chloride				0.645	0.633	0.599	0.594	0.582	0.532	0.497
29) C	3-chloropropene	0.841	0.830	0.708	0.784	0.791	0.810	0.612	0.548	0.7405	14.59
30) C	carbon disulfide	1.257	1.282	1.311	1.240	1.246	1.286	1.157	1.030	1.2261	7.48
31)	Freon 113	0.744	0.787	0.795	0.764	0.759	0.739	0.587	0.546	0.7153	13.19
32)	trans-1,2-dichloroethene	0.691	0.730	0.746	0.703	0.699	0.719	0.519	0.527	0.6669	13.57
33) C	1,1-dichloroethane	0.841	0.921	0.922	0.900	0.890	0.874	0.629	0.624	0.8251	15.20
34) C	MTBE	0.987	1.015	1.043	0.994	1.012	1.075	0.900	0.846	0.9840	7.65
35) C	vinyl acetate	1.140	1.103	1.079	1.047	1.133	1.102	0.887	0.813	1.0379	11.67
36) C	2-butanone	1.269	1.286	1.165	1.172	1.235	0.953	0.868	1.1355	14.27	

**Initial Calibration Summary**  
**Form 6**  
**Air Volatiles**

<b>Client</b>	: GZA GeoEnvironmental, Inc.	<b>Lab Number</b>	: L2244833
<b>Project Name</b>	: 101 E 150TH ST RI	<b>Project Number</b>	: 41.0162951.10
<b>Instrument ID</b>	: AIRLAB15	<b>Ical Ref</b>	: ICAL19277
<b>Calibration dates</b>	: 08/20/22 21:43	08/21/22 02:22	

Calibration Files

```
0.2 =r1534841.D 0.5 =r1534842.D 1.0 =r1534843.D 5.0 =r1534844.D 10 =r1534845.D 20 =r1534846.D
50 =r1534847.D 100 =r1534848.D
```

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)	cis-1,2-dichloroethene	0.628	0.659	0.675	0.659	0.661	0.651	0.470	0.476	0.6099	14.02
38)	Ethyl Acetate	0.181	0.168	0.167	0.159	0.163	0.124	0.127	0.1555	13.89	
39) C	chloroform	0.778	0.801	0.796	0.770	0.772	0.748	0.609	0.583	0.7319	11.73
40)	Tetrahydrofuran	0.705	0.714	0.689	0.705	0.759	0.585	0.542	0.6713	11.57	
41)	2,2-dichloropropane	0.575	0.607	0.611	0.605	0.619	0.635	0.520	0.485	0.5822	9.04
42) C	1,2-dichloroethane	0.707	0.643	0.638	0.590	0.596	0.579	0.381	0.396	0.5662	20.67
43) I	1,4-difluorobenzene										
44) C	hexane	0.359	0.382	0.389	0.365	0.366	0.378	0.333	0.322	0.3618	6.51
45)	diisopropyl ether	0.170	0.176	0.177	0.175	0.174	0.179	0.164	0.156	0.1712	4.64
46)	tert-butyl ethyl ether	0.625	0.643	0.673	0.664	0.669	0.674	0.550	0.574	0.6339	7.56
47) s	1,2-dichloroethane-D4	0.451	0.454	0.460	0.447	0.447	0.448	0.335	0.330	0.4216	13.05
48) C	1,1,1-trichloroethane	0.303	0.302	0.311	0.309	0.315	0.319	0.246	0.243	0.2936	10.46
49)	1,1-dichloropropene	0.288	0.308	0.314	0.307	0.313	0.322	0.304	0.274	0.3037	5.07
50) C	benzene	0.664	0.653	0.660	0.648	0.651	0.651	0.650	0.590	0.6459	3.62
51)	thiophene	0.376	0.399	0.413	0.420	0.431	0.417	0.383	0.369	0.4011	5.65
52) C	carbon tetrachloride	0.249	0.249	0.257	0.260	0.273	0.272	0.230	0.221	0.2514	7.38
53)	cyclohexane	0.381	0.391	0.399	0.384	0.386	0.400	0.363	0.373	0.3847	3.23
54)	tert-amyl methyl ether	0.483	0.490	0.501	0.504	0.521	0.560	0.526	0.489	0.5093	4.99
55)	dibromomethane	0.220	0.224	0.220	0.210	0.211	0.216	0.176	0.170	0.2060	10.21
56) C	1,2-dichloropropane	0.252	0.262	0.266	0.265	0.264	0.271	0.217	0.211	0.2510	9.35
57)	bromodichloromethane	0.333	0.361	0.371	0.360	0.366	0.389	0.345	0.333	0.3573	5.43
58) C	1,4-dioxane	0.121	0.135	0.144	0.131	0.135	0.150	0.133	0.130	0.1349	6.56
59) C	trichloroethene	0.232	0.250	0.248	0.244	0.243	0.251	0.215	0.204	0.2360	7.40
60) C	2,2,4-trimethylpentane	1.224	1.280	1.296	1.218	1.185	1.215	1.066	1.045	1.1911	7.65
61)	methyl methacrylate	0.334	0.354	0.364	0.379	0.379	0.294	0.272	0.3394		12.37
62)	heptane	0.541	0.554	0.567	0.541	0.552	0.602	0.500	0.443	0.5376	8.87
63) C	cis-1,3-dichloropropene	0.277	0.288	0.295	0.313	0.326	0.344	0.332	0.305	0.3101	7.46
64) C	4-methyl-2-pentanone	0.615	0.657	0.619	0.642	0.706	0.582	0.515	0.6194		9.71
65)	trans-1,3-dichloropropene	0.256	0.257	0.275	0.294	0.309	0.326	0.308	0.288	0.2892	8.72
66) C	1,1,2-trichloroethane	0.228	0.240	0.240	0.232	0.234	0.251	0.209	0.199	0.2290	7.36
67) I	chlorobenzene-D5										
68) C	toluene	3.312	3.321	3.402	3.226	3.286	3.383	3.045	2.818	3.2240	6.15
69) s	toluene-D8	4.665	4.673	4.687	4.548	4.517	4.760	4.678	4.392	4.6151	2.59
70)	2-methylthiophene	2.455	2.619	2.638	2.770	2.833	2.860	2.563	2.324	2.6325	7.07
71)	1,3-dichloropropane	1.611	1.665	1.692	1.639	1.673	1.776	1.786	1.523	1.6706	5.13
72)	2-hexanone	2.324	2.497	2.661	2.546	2.689	3.028	2.573	2.167	2.5605	10.01



**Initial Calibration Summary**  
**Form 6**  
**Air Volatiles**

<b>Client</b>	: GZA GeoEnvironmental, Inc.	<b>Lab Number</b>	: L2244833
<b>Project Name</b>	: 101 E 150TH ST RI	<b>Project Number</b>	: 41.0162951.10
<b>Instrument ID</b>	: AIRLAB15	<b>Ical Ref</b>	: ICAL19277
<b>Calibration dates</b>	: 08/20/22 21:43	08/21/22 02:22	

Calibration Files

```
0.2 =r1534841.D 0.5 =r1534842.D 1.0 =r1534843.D 5.0 =r1534844.D 10 =r1534845.D 20 =r1534846.D
50 =r1534847.D 100 =r1534848.D
```

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)	3-methylthiophene	2.577	2.620	2.639	2.813	2.918	2.930	2.597	2.324	2.6775	7.55
74)	dibromochloromethane	1.223	1.268	1.313	1.364	1.428	1.603	1.412	1.266	1.3597	8.99
75) C	1,2-dibromoethane	1.505	1.553	1.596	1.559	1.560	1.670	1.620	1.404	1.5585	5.10
76)	butyl acetate	0.323	0.351	0.379	0.406	0.425	0.437	0.375	0.3851		10.54
77)	octane	1.152	1.248	1.277	1.274	1.299	1.345	1.305	1.182	1.2603	5.11
78) C	tetrachloroethene	1.168	1.243	1.250	1.184	1.194	1.295	1.197	1.032	1.1953	6.52
79)	1,1,1,2-tetrachloroethane	1.085	1.083	1.096	1.091	1.130	1.231	1.072	0.924	1.0889	7.72
80) C	chlorobenzene	2.602	2.582	2.605	2.503	2.488	2.646	2.562	2.084	2.5092	7.16
81) C	ethylbenzene	3.866	3.979	4.066	4.034	4.147	4.519	3.874	3.551	4.0045	6.88
82)	2-ethylthiophene	2.845	3.058	3.102	3.349	3.435	3.493	3.061	2.729	3.1342	8.74
83) C	m+p-xylene	3.268	3.363	3.468	3.335	3.438	3.644	3.098	2.731	3.2931	8.41
84) C	bromoform	0.737	0.864	0.877	1.013	1.093	1.270	1.193	1.074	1.0152	17.66
85) C	styrene	2.283	2.437	2.578	2.551	2.614	2.888	2.773	2.382	2.5634	7.80
86) C	1,1,2,2-tetrachloroethane	2.492	2.591	2.605	2.507	2.539	2.610	2.461	1.907	2.4638	9.40
87) C	o-xylene	3.223	3.411	3.462	3.380	3.472	3.622	3.062	2.561	3.2742	10.20
88)	1,2,3-trichloropropane	2.001	2.094	2.140	2.083	2.092	2.244	2.191	1.898	2.0929	5.14
89)	nonane	3.322	3.619	3.679	3.788	3.979	4.294	3.656	2.980	3.6645	10.81
90) s	bromofluorobenzene	2.841	2.976	2.920	2.881	3.002	3.071	2.839	2.771	2.9127	3.41
91) C	isopropylbenzene	4.317	4.510	4.587	4.525	4.604	4.815	4.367	3.669	4.4245	7.71
92)	bromobenzene	2.572	2.701	2.711	2.653	2.670	2.824	2.743	2.379	2.6566	5.03
93)	2-chlorotoluene	1.178	1.213	1.227	1.239	1.310	1.379	1.206	1.088	1.2301	7.03
94)	n-propylbenzene	1.317	1.376	1.455	1.474	1.537	1.589	1.429	1.240	1.4273	8.00
95)	4-chlorotoluene	1.144	1.219	1.233	1.242	1.282	1.370	1.193	1.102	1.2232	6.73
96)	4-ethyl toluene	4.225	4.578	4.757	4.545	4.623	5.101	4.534	3.888	4.5315	7.88
97)	1,3,5-trimethylbenzene	3.615	3.812	3.893	3.886	3.947	4.319	3.774	3.251	3.8119	7.95
98)	tert-butylbenzene	4.006	4.243	4.319	4.256	4.257	4.231	3.524	2.685	3.9402	14.46
99)	1,2,4-trimethylbenzene	3.745	4.022	4.088	3.908	4.324	4.246	3.415	2.912	3.8323	12.28
100)	decane	3.641	3.969	4.029	4.051	4.027	3.903	3.554	3.075	3.7810	9.02
101) C	Benzyl Chloride	1.479	1.661	1.832	2.058	2.290	2.623	2.456	2.300	2.0875	19.22
102)	1,3-dichlorobenzene	2.401	2.550	2.470	2.445	2.474	2.671	2.376	2.013	2.4250	7.85
103) C	1,4-dichlorobenzene	2.256	2.481	2.492	2.340	2.403	2.672	2.375	2.002	2.3778	8.23
104)	sec-butylbenzene	5.601	5.866	5.990	5.942	6.035	6.341	5.360	4.456	5.6987	10.20
105)	1,2,3-trimethylbenzene	3.415	3.639	3.674	3.745	3.818	3.856	3.142	2.504	3.4740	13.14
106)	p-isopropyltoluene	4.790	5.162	5.218	5.244	5.134	5.067	4.198	3.238	4.7562	14.81
107)	1,2-dichlorobenzene	2.121	2.296	2.355	2.217	2.291	2.558	2.240	2.010	2.2610	7.18
108)	n-butylbenzene	3.997	4.451	4.644	4.885	4.971	4.736	4.166	3.708	4.4449	10.12



**Initial Calibration Summary**  
**Form 6**  
**Air Volatiles**

<b>Client</b>	: GZA GeoEnvironmental, Inc.	<b>Lab Number</b>	: L2244833
<b>Project Name</b>	: 101 E 150TH ST RI	<b>Project Number</b>	: 41.0162951.10
<b>Instrument ID</b>	: AIRLAB15	<b>Ical Ref</b>	: ICAL19277
<b>Calibration dates</b>	: 08/20/22 21:43    08/21/22 02:22		

Calibration Files

```
0.2 =r1534841.D 0.5 =r1534842.D 1.0 =r1534843.D 5.0 =r1534844.D 10 =r1534845.D 20 =r1534846.D
50 =r1534847.D 100 =r1534848.D
```

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)	indan	3.424	3.634	3.841	3.963	3.927	3.958	3.577	3.119	3.6804	8.20
110)	indene	2.431	2.755	2.836	3.088	3.078	2.952	2.744	2.517	2.8001	8.60
111) C	1,2-dibromo-3-chloropropane	0.870	0.973	1.064	1.186	1.248	1.318	1.161	1.069	1.1113	13.21
112)	undecane	3.585	4.229	4.363	4.550	4.451	4.188	3.843	3.291	4.0626	10.98
113)	1,2,4,5-tetramethylbenzene	5.371	6.148	6.494	6.509	6.498	6.534	5.620	4.545	5.9647	12.20
114)	dodecane	2.956	3.896	4.212	4.927	4.778	4.135	3.758	3.329	3.9990	16.74
115) C	1,2,4-trichlorobenzene	0.876	1.267	1.384	1.559	1.773	1.672	1.595	1.461	1.4483	19.43
116)	naphthalene	3.485	4.304	4.634	5.635	5.883	5.038	4.771	4.447	4.7746	15.93
117)	1,2,3-trichlorobenzene	1.007	1.393	1.463	1.735	1.920	1.662	1.588	1.448	1.5271	17.81
118)	benzothiophene	7.533	8.341	8.880	9.740	9.614	8.383	6.635	8.4465	13.11	
119) C	hexachlorobutadiene	0.900	1.189	1.214	1.331	1.394	1.329	1.177	0.996	1.1912	14.32
120)	2-methylnaphthalene					0.824	1.139	1.355	1.186	1.345	1.417
121)	1-methylnaphthalene					1.804	1.864	2.103	2.048	2.281	2.299
								2.0666			9.95



# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\08\0820T\_I\  
 Data File : r1534851.D  
 Acq On : 21 Aug 2022 11:33 AM  
 Operator : AIRLAB15:TS  
 Sample : CTO15-LLSTD10  
 Misc : WG1678536  
 ALS Vial : 0      Sample Multiplier: 1

1,2,3-TCB non  
target analyte  
  
 Qualify 1,2,4-  
TCB UJ all  
samples

Quant Time: Aug 22 19:29:28 2022  
 Quant Method : O:\Forensics\Data\Airlab15\2022\08\0820T\_I\TFS15\_220820.M  
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis  
 QLast Update : Mon Aug 22 19:26:21 2022  
 Response via : Initial Calibration

Min. RRF : 0.000    Min. Rel. Area : 60%    Max. R.T. Dev 0.33min  
 Max. RRF Dev : 30%    Max. Rel. Area : 140%    +/- 30

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	103	0.00
2	chlorodifluoromethane	0.669	0.641	4.2	94	0.00
3	propylene	0.380	0.381	-0.3	89	0.00
4	propane	0.508	0.518	-2.0	106	0.00
5	dichlorodifluoromethane	0.734	0.706	3.8	91	0.00
6 C	chloromethane	0.405	0.366	9.6	84	0.00
7	Freon-114	0.855	0.868	-1.5	95	0.00
8 C	methanol	0.239	0.192	19.7	96	0.00
9 C	vinyl chloride	0.397	0.417	-5.0	103	0.00
10 C	1,3-butadiene	0.343	0.410	-19.5	118	0.00
11	butane	0.756	0.684	9.5	87	0.00
13 C	bromomethane	0.312	0.323	-3.5	102	0.00
14 C	chloroethane	0.194	0.197	-1.5	101	0.00
15	ethanol	0.349	0.329	5.7	92	0.01
16	dichlorofluoromethane	0.772	0.693	10.2	88	0.00
17 C	vinyl bromide	0.314	0.324	-3.2	102	0.00
18 C	acrolein	0.185	0.187	-1.1	98	0.00
19	acetone	0.607	0.632	-4.1	103	0.00
20 C	acetonitrile	0.425	0.378	11.1	93	0.00
21	trichlorofluoromethane	0.644	0.640	0.6	97	0.00
22	isopropyl alcohol	0.768	0.726	5.5	98	0.00
23 C	acrylonitrile	0.365	0.342	6.3	92	0.00
24	pentane	0.864	0.748	13.4	86	0.00
25	ethyl ether	0.808	0.739	8.5	99	0.00
26 C	1,1-dichloroethene	0.625	0.569	9.0	81	0.00
27	tertiary butyl alcohol	0.716	0.688	3.9	93	0.01
28 C	methylene chloride	0.583	0.546	6.3	94	0.00
29 C	3-chloropropene	0.741	0.663	10.5	86	0.00
30 C	carbon disulfide	1.226	1.227	-0.1	101	0.00
31	Freon 113	0.715	0.742	-3.8	100	0.00
32	trans-1,2-dichloroethene	0.667	0.635	4.8	93	0.00
33 C	1,1-dichloroethane	0.825	0.803	2.7	93	0.00
34 C	MTBE	0.984	1.109	-12.7	112	0.00
35 C	vinyl acetate	1.038	1.064	-2.5	96	0.00
36 C	2-butanone	1.135	1.166	-2.7	102	0.00
37	cis-1,2-dichloroethene	0.610	0.594	2.6	92	0.00
38	Ethyl Acetate	0.156	0.160	-2.6	103	0.00
39 C	chloroform	0.732	0.728	0.5	97	0.00
40	Tetrahydrofuran	0.671	0.691	-3.0	101	0.00

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab15\2022\08\0820T\_I\  
 Data File : r1534851.D  
 Acq On : 21 Aug 2022 11:33 AM  
 Operator : AIRLAB15:TS  
 Sample : CTO15-LLSTD10  
 Misc : WG1678536  
 ALS Vial : 0      Sample Multiplier: 1

1,2,3-TCB non  
target analyte  
  
 Qualify 1,2,4-  
TCB UJ all  
samples

Quant Time: Aug 22 19:29:28 2022  
 Quant Method : O:\Forensics\Data\Airlab15\2022\08\0820T\_I\TFS15\_220820.M  
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis  
 QLast Update : Mon Aug 22 19:26:21 2022  
 Response via : Initial Calibration

Min. RRF : 0.000    Min. Rel. Area : 60%    Max. R.T. Dev 0.33min  
 Max. RRF Dev : 30%    Max. Rel. Area : 140%    +/- 30

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	0.582	0.584	-0.3	97	0.00
42 C	1,2-dichloroethane	0.566	0.525	7.2	90	0.00
43 I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00
44 C	hexane	0.362	0.356	1.7	98	0.00
45	diisopropyl ether	0.171	0.164	4.1	95	0.00
46	tert-butyl ethyl ether	0.634	0.591	6.8	89	0.00
47 s	1,2-dichloroethane-D4	0.422	0.432	-2.4	98	0.00
48 C	1,1,1-trichloroethane	0.294	0.315	-7.1	101	0.00
49	1,1-dichloropropene	0.304	0.319	-4.9	103	0.00
50 C	benzene	0.646	0.637	1.4	99	0.00
52 C	carbon tetrachloride	0.251	0.268	-6.8	99	0.00
53	cyclohexane	0.385	0.381	1.0	100	0.00
54	tert-amyl methyl ether	0.509	0.547	-7.5	106	0.00
55	dibromomethane	0.206	0.197	4.4	95	0.00
56 C	1,2-dichloropropane	0.251	0.255	-1.6	97	0.00
57	bromodichloromethane	0.357	0.370	-3.6	102	0.00
58 C	1,4-dioxane	0.135	0.125	7.4	93	0.00
59 C	trichloroethylene	0.236	0.246	-4.2	102	0.00
60 C	2,2,4-trimethylpentane	1.191	1.190	0.1	102	0.00
61	methyl methacrylate	0.339	0.374	-10.3	100	0.00
62	heptane	0.538	0.597	-11.0	109	0.00
63 C	cis-1,3-dichloropropene	0.310	0.345	-11.3	107	0.00
64 C	4-methyl-2-pentanone	0.619	0.681	-10.0	107	0.00
65	trans-1,3-dichloropropene	0.289	0.274	5.2	90	0.00
66 C	1,1,2-trichloroethane	0.229	0.241	-5.2	104	0.00
67 I	chlorobenzene-D5	1.000	1.000	0.0	97	0.00
68 C	toluene	3.224	3.287	-2.0	97	0.00
69 s	toluene-D8	4.615	4.915	-6.5	106	0.00
71	1,3-dichloropropane	1.671	1.669	0.1	97	0.00
72	2-hexanone	2.560	2.785	-8.8	101	0.00
74	dibromochloromethane	1.360	1.571	-15.5	107	0.00
75 C	1,2-dibromoethane	1.558	1.593	-2.2	99	0.00
76	butyl acetate	0.385	0.424	-10.1	102	0.00
77	octane	1.260	1.216	3.5	91	0.00
78 C	tetrachloroethene	1.195	1.239	-3.7	101	0.00
79	1,1,1,2-tetrachloroethane	1.089	1.155	-6.1	100	0.00
80 C	chlorobenzene	2.509	2.492	0.7	98	0.00

# Evaluate Continuing Calibration Report

Data Path : O:\Forensics\DATA\Airlab15\2022\08\0820T\_I\  
Data File : r1534851.D  
Acq On : 21 Aug 2022 11:33 AM  
Operator : AIRLAB15:TS  
Sample : CTO15-LLSTD10  
Misc : WG1678536  
ALS Vial : 0 Sample Multiplier: 1

1,2,3-TCB non target analyte

Qualify 1,2,4-TCB UJ all samples

Quant Time: Aug 22 19:29:28 2022  
Quant Method : O:\Forensics\Data\Airlab15\2022\08\0820T\_I\TFS15\_220820.M  
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis  
QLast Update : Mon Aug 22 19:26:21 2022  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min  
Max. RRF Dev : 30% Max. Rel. Area : 140% +/- 30

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	C ethylbenzene	4.004	4.288	-7.1	101	0.00
83	C m+p-xylene	3.293	3.447	-4.7	98	0.02
84	C bromoform	1.015	1.140	-12.3	102	0.00
85	C styrene	2.563	2.670	-4.2	100	0.00
86	C 1,1,2,2-tetrachloroethane	2.464	2.211	10.3	85	0.00
87	C o-xylene	3.274	3.463	-5.8	97	0.00
88	1,2,3-trichloropropane	2.093	2.119	-1.2	99	0.00
89	nonane	3.665	3.952	-7.8	97	0.00
90	s bromofluorobenzene	2.913	3.287	-12.8	107	0.00
91	C isopropylbenzene	4.424	4.872	-10.1	103	0.00
92	bromobenzene	2.657	2.666	-0.3	97	0.00
93	2-chlorotoluene	1.230	1.284	-4.4	95	0.00
94	n-propylbenzene	1.427	1.457	-2.1	92	0.00
95	4-chlorotoluene	1.223	1.232	-0.7	94	0.00
96	4-ethyl toluene	4.532	4.662	-2.9	98	0.00
97	1,3,5-trimethylbenzene	3.812	3.874	-1.6	96	0.00
98	tert-butylbenzene	3.940	4.068	-3.2	93	0.00
99	1,2,4-trimethylbenzene	3.832	3.759	1.9	85	0.00
100	decane	3.781	3.674	2.8	89	0.00
101	C Benzyl Chloride	2.088	1.873	10.3	80	0.00
102	1,3-dichlorobenzene	2.425	2.160	10.9	85	0.00
103	C 1,4-dichlorobenzene	2.378	2.083	12.4	84	0.00
104	sec-butylbenzene	5.699	6.193	-8.7	100	0.00
106	p-isopropyltoluene	4.756	4.717	0.8	90	0.00
107	1,2-dichlorobenzene	2.261	1.935	14.4	82	0.00
108	n-butylbenzene	4.445	4.798	-7.9	94	0.00
111	C 1,2-dibromo-3-chloropropane	1.111	1.259	-13.3	98	0.00
112	undecane	4.063	4.029	0.8	88	0.00
114	dodecane	3.999	4.175	-4.4	85	0.00
115	C 1,2,4-trichlorobenzene	1.448	0.982	32.2#	54#	0.00
116	naphthalene	4.775	5.411	-13.3	90	0.00
117	1,2,3-trichlorobenzene	1.527	1.672	-9.5	85	0.00
119	C hexachlorobutadiene	1.191	0.717	39.8#	50#	0.00

\* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 0 CCC's out = 2

# Alpha Analytical Air Lab

## Instrument Run Log

ID: Airlab15  
 Date: 08/20/22  
 Initials: JB

Internal Standard/Surrogate IDs: SS20-028 / SS21-026  
 Internal Standard/Surrogate Volume: 100 ml  
 Sequence File Name: 220820.S

SIM ICAL# 19131

Full Scan ICAL# 19130

APH ICAL#  
19132

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Pass? Y/N
1	BA15082001	TO15_SFS.qgm	R1534834.qgd	250 ML			NA
1	BA15082002	TO15_SFS.qgm	R1534835.qgd	250 ML			NA
1	BA15082003	TO15_SFS.qgm	R1534836.qgd	250 ML			NA
1	TA15082001	TO15_SFS.qgm	R1534837.qgd	250 ML	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R1534838.qgd	SS22-011D 50ML		DEFAULT	NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R1534839.qgd	SS22-011D 100ML		DEFAULT	NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R1534840.qgd	SS22-011D 250ML		DEFAULT	NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R1534841.qgd	SS22-011C 50ML		DEFAULT	NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R1534842.qgd	SS22-011C 125ML		DEFAULT	NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R1534843.qgd	SS22-011C 250ML		DEFAULT	NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R1534844.qgd	SS22-011B 125ML		DEFAULT	NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R1534845.qgd	SS22-011B 250ML		DEFAULT	NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R1534846.qgd	SS22-011A 50ML		DEFAULT	NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R1534847.qgd	SS22-011A 125ML		DEFAULT	NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R1534848.qgd	SS22-011A 250ML		DEFAULT	NA
1	BA15082002	TO15_SFS.qgm	R1534849.qgd	250 ML		DEFAULT	NA
1	BA15082003	TO15_SFS.qgm	R1534850.qgd	250 ML		DEFAULT	NA
2	CTO15-LLSTD10	TO15_SFS.qgm	R1534851.qgd	SS22-015B 250ML		DEF-ICV-AP2	NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R1534852.qgd	SS22-015B 125ML		DEF-ICV-AP2	NA

# Alpha Analytical Air Lab

## Instrument Run Log

**Date(s) of Initial Calibration:** Refer to Initial Calibration Summary Form 6

**Date Acquired:** see Instrument Performance Check Summary and/or quantitation report.

**Sample ID information:** L1301234-01,3,250,250  
[Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL)]

**Dilution Factor:** See Form 1 report, or divide nominal volume by actual volume analyzed

**Instrument Performance Check (Tune) Summary**  
**Form 5**  
**Air Volatiles**  
**Bromofluorobenzene (BFB)**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Instrument ID	: AIRLAB15	Analysis Date	: 08/23/22 11:31
Tune Standard	: WG1678730-1	Tune File ID	: r1534872_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	19.6
75	30.0 - 66.0% of mass 95	43.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.3 (.5 )1
174	50.0 - 120.0% of mass 95	57.9
175	4.0 - 9.0% of mass 174	4 (6.9 )1
176	93.0 - 101% of mass 174	54.6 (94.4)1
177	5.0 - 9.0% of mass 176	3.6 (6.6 )2

1-Value is % of mass 174    2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1678730-2CCAL	WG1678730-2	R1534875	08/23/22 14:10
WG1678730-3LCS	WG1678730-3	R1534875	08/23/22 14:10
WG1678730-4BLANK	WG1678730-4	R1534877	08/23/22 17:30
AA-03	L2244833-07D	R1534879	08/23/22 18:49
SV-17	L2244833-01D	R1534880	08/23/22 19:25
SV-24	L2244833-02	R1534881	08/23/22 20:05
SV-25	L2244833-03D	R1534882	08/23/22 20:45
SV-18	L2244833-04D	R1534883	08/23/22 21:21
SV-19	L2244833-05D	R1534884	08/23/22 21:59
SV-28	L2244833-06D	R1534885	08/23/22 22:35
WG1678730-5DUP	WG1678730-5	R1534891	08/24/22 02:31
SV-24	L2244833-02D	R1534895	08/24/22 07:41
SV-25	L2244833-03D2	R1534896	08/24/22 08:17
SV-19	L2244833-05D2	R1534897	08/24/22 08:53
SV-17	L2244833-01D2	R1534900	08/24/22 10:40

**Calibration Verification Summary**  
**Form 7**  
**Air Volatiles**

Client : GZA GeoEnvironmental, Inc.  
 Project Name : 101 E 150TH ST RI  
 Instrument ID : AIRLAB15  
 Lab File ID : R1534875 ✓  
 Sample No : WG1678730-2  
 Channel :

Lab Number : L2244833  
 Project Number : 41.0162951.10 ✓  
 Calibration Date : 08/23/22 14:10  
 Init. Calib. Date(s) : 08/20/22 08/21/22  
 Init. Calib. Times : 21:43 02:22

spike amount 10

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	110	.03
chlorodifluoromethane	0.669	0.578	-	13.6	30	91	.02
propylene	0.38	0.37	-	2.6	30	93	.02
propane	0.508	0.439	-	13.6	30	96	.02
dichlorodifluoromethane	0.734	0.651	-	11.3	30	90	.02
chloromethane	0.405	0.368	-	9.1	30	91	.02
Freon-114	0.855	0.815	-	4.7	30	96	.02
methanol	0.239	0.161	non target	32.6*	30	87	.02
vinyl chloride	0.397	0.365	-	8.1	30	97	.02
1,3-butadiene	0.343	0.328	○	4.4 ○	30	102	.03
butane	0.756	0.6	-	20.6	30	82	.03
bromomethane	0.312	0.279	-	10.6	30	95	.03
chloroethane	0.194	0.174	-	10.3	30	96	.04
ethanol	0.349	0.283	-	18.9	30	85	.03
dichlorofluoromethane	0.772	0.57	-	26.2	30	78	.03
vinyl bromide	0.314	0.253	-	19.4	30	86	.03
acrolein	0.185	0.163	-	11.9	30	92	.03
acetone	0.607	0.498	-	18	30	88	.03
acetonitrile	0.425	0.33	-	22.4	30	87	.03
trichlorofluoromethane	0.644	0.495	-	23.1	30	81	.03
isopropyl alcohol	0.768	0.595	-	22.5	30	87	.03
acrylonitrile	0.365	0.316	-	13.4	30	92	.03
pentane	0.864	0.802	-	7.2	30	99	.03
ethyl ether	0.808	0.819	-	-1.4	30	118	.03
1,1-dichloroethene	0.625	0.581	-	7	30	89	.03
tertiary butyl alcohol	0.716	0.574	-	19.8	30	84	.04
methylene chloride	0.583	0.583	-	0	30	108	.03
3-chloropropene	0.741	0.721	-	2.7	30	101	.04
carbon disulfide	1.226	1.146	-	6.5	30	102	.03
Freon 113	0.715	0.705	-	1.4	30	103	.04
trans-1,2-dichloroethene	0.667	0.538	-	19.3	30	85	.03
1,1-dichloroethane	0.825	0.728	-	11.8	30	90	.04
MTBE	0.984	0.935	-	5	30	102	.04
vinyl acetate	1.038	0.873	-	15.9	30	85	.03
2-butanone	1.135	1.053	-	7.2	30	99	.03
cis-1,2-dichloroethene	0.61	0.534	-	12.5	30	89	.03
Ethyl Acetate	0.156	0.133	-	14.7	30	92	.03
chloroform	0.732	0.65	-	11.2	30	93	.04
Tetrahydrofuran	0.671	0.641	-	4.5	30	100	.03
2,2-dichloropropane	0.582	0.47	-	19.2	30	84	.03
1,2-dichloroethane	0.566	0.422	-	25.4	30	78	.03
1,4-difluorobenzene	1	1	-	0	30	102	.03
hexane	0.362	0.338	-	6.6	30	94	.03

\* Value outside of QC limits.



**Calibration Verification Summary**  
**Form 7**  
**Air Volatiles**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Instrument ID	: AIRLAB15	Calibration Date	: 08/23/22 14:10
Lab File ID	: R1534875	Init. Calib. Date(s)	: 08/20/22      08/21/22
Sample No	: WG1678730-2	Init. Calib. Times	: 21:43      02:22
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.171	0.155	-	9.4	30	91	.03
tert-butyl ethyl ether	0.634	0.529	-	16.6	30	81	.03
1,1,1-trichloroethane	0.294	0.268	-	8.8	30	87	.03
1,1-dichloropropene	0.304	0.314	-	-3.3	30	102	.03
benzene	0.646	0.68	-	-5.3	30	107	.03
carbon tetrachloride	0.251	0.228	-	9.2	30	85	.03
cyclohexane	0.385	0.367	-	4.7	30	97	.03
tert-amyl methyl ether	0.509	0.521	-	-2.4	30	102	.03
dibromomethane	0.206	0.188	-	8.7	30	91	.03
1,2-dichloropropane	0.251	0.256	-	-2	30	99	.03
bromodichloromethane	0.357	0.33	-	7.6	30	92	.03
1,4-dioxane	0.135	0.138	-	-2.2	30	104	.03
trichloroethylene	0.236	0.245	-	-3.8	30	103	.03
2,2,4-trimethylpentane	1.191	1.137	-	4.5	30	98	.03
methyl methacrylate	0.339	0.354	-	-4.4	30	95	.03
heptane	0.538	0.584	-	-8.6	30	108	.03
cis-1,3-dichloropropene	0.31	0.357	-	-15.2	30	112	.03
4-methyl-2-pentanone	0.619	0.677	-	-9.4	30	108	.03
trans-1,3-dichloropropene	0.289	0.271	-	6.2	30	89	.03
1,1,2-trichloroethane	0.229	0.253	-	-10.5	30	110	.03
chlorobenzene-D5	1	1	-	0	30	90	.02
toluene	3.224	3.607	-	-11.9	30	99	.02
1,3-dichloropropane	1.671	1.846	-	-10.5	30	99	.02
2-hexanone	2.56	3.073	-	-20	30	103	.02
dibromochloromethane	1.36	1.507	-	-10.8	30	95	.03
1,2-dibromoethane	1.558	1.843	-	-18.3	30	106	.03
butyl acetate	0.385	0.467	-	-21.3	30	103	.02
octane	1.26	1.286	-	-2.1	30	89	.02
tetrachloroethylene	1.195	1.356	-	-13.5	30	102	.03
1,1,1,2-tetrachloroethane	1.089	1.128	-	-3.6	30	90	.02
chlorobenzene	2.509	2.901	-	-15.6	30	105	.03
ethylbenzene	4.004	4.753	-	-18.7	30	103	.02
m+p-xylene	3.293	3.815	-	-15.9	30	100	.03
bromoform	1.015	1.204	-	-18.6	30	99	.03
styrene	2.563	3.209	-	-25.2	30	110	.03
1,1,2,2-tetrachloroethane	2.464	2.766	-	-12.3	30	98	.02
o-xylene	3.274	3.856	-	-17.8	30	100	.02
1,2,3-trichloropropene	2.093	2.258	-	-7.9	30	97	.02
nonane	3.665	4.416	-	-20.5	30	100	.02
isopropylbenzene	4.424	5.085	-	-14.9	30	99	.02
bromobenzene	2.657	2.806	-	-5.6	30	95	.02
2-chlorotoluene	1.23	1.329	-	-8	30	91	.03
n-propylbenzene	1.427	1.521	-	-6.6	30	89	.02

\* Value outside of QC limits.



**Calibration Verification Summary**  
**Form 7**  
**Air Volatiles**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Instrument ID	: AIRLAB15	Calibration Date	: 08/23/22 14:10
Lab File ID	: R1534875	Init. Calib. Date(s)	: 08/20/22      08/21/22
Sample No	: WG1678730-2	Init. Calib. Times	: 21:43      02:22
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	1.223	1.316	-	-7.6	30	92	.03
4-ethyl tolue	4.532	5.121	-	-13	30	100	.02
1,3,5-trimethylbenzene	3.812	4.582	-	-20.2	30	104	.02
tert-butylbenzene	3.94	4.247	-	-7.8	30	90	.02
1,2,4-trimethylbenzene	3.832	4.59	-	-19.8	30	95	.02
decane	3.781	3.936	-	-4.1	30	88	.02
Benzyl Chloride	2.088	1.914	-	8.3	30	75	.03
1,3-dichlorobenzene	2.425	2.776	-	-14.5	30	101	.02
1,4-dichlorobenzene	2.378	2.688	-	-13	30	101	.02
sec-butylbenzene	5.699	6.466	-	-13.5	30	96	.02
p-isopropyltoluene	4.756	4.875	-	-2.5	30	85	.02
1,2-dichlorobenzene	2.261	2.58	-	-14.1	30	101	.02
n-butylbenzene	4.445	5.17	-	-16.3	30	94	.02
1,2-dibromo-3-chloropropan	1.111	1.204	-	-8.4	30	87	.02
undecane	4.063	4.445	-	-9.4	30	90	.02
dodecane	3.999	4.877	-	-22	30	92	.02
1,2,4-trichlorobenzene	1.448	1.458	-	-0.7	30	74	.02
naphthalene	4.775	5.853	-	-22.6	30	89	.02
1,2,3-trichlorobenzene	1.527	1.791	-	-17.3	30	84	.02
hexachlorobutadiene	1.191	1.252	-	-5.1	30	81	.02



\* Value outside of QC limits.

**Internal Standard Area and RT Summary**  
**Form 8a**  
**Air Volatiles**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Instrument ID	: AIRLAB15	Analysis Date	: 08/23/22 14:10:00
Sample No	: WG1678730-2	Lab File ID	: R1534875

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1678730-2	379300	9.57	747555	11.84	148138	16.57
Upper Limit	531020	9.90	1046577	12.17	207393	16.90
Lower Limit	227580	9.24	448533	11.51	88883	16.24
Sample ID						
WG1678730-3 LCS	379300	9.57	747555	11.84	148138	16.57
WG1678730-4 BLANK	339351	9.56	735403	11.84	158542	16.57
AA-03	312795	9.56	656095	11.84	150767	16.57
SV-17	338348	9.57	719936	11.84	163965	16.57
SV-24	320496	9.57	673162	11.84	162732	16.57
SV-25	334696	9.57	657670	11.84	184643	16.57
SV-18	340427	9.56	686223	11.84	137303	16.57
SV-19	349777	9.57	687504	11.84	135188	16.57
SV-28	353999	9.56	693723	11.84	139331	16.57
SV-3 DUP	326560	9.57	723381	11.84	159473	16.56
SV-24	299279	9.56	629310	11.83	146599	16.56
SV-25	304784	9.56	650841	11.83	163966	16.56
SV-19	336245	9.55	744079	11.83	163145	16.56
SV-17	326191	9.55	696895	11.83	160183	16.53

Area Upper Limit = +40% of internal standard area  
 Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT  
 RT Lower Limit = -0.33 minutes of internal standard RT

\* Values outside of QC limits



# Alpha Analytical Air Lab

## Instrument Run Log

ID: Airlab15  
 Date: 08/22/22  
 Initials: NL

Internal Standard/Surrogate IDs: SS20-028 / SS21-026  
 Internal Standard/Surrogate Volume: 100 ml  
 Sequence File Name: 220822.S

SIM ICAL# 19131

Full Scan ICAL# 19130

APH ICAL#  
19132

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Pass? Y/N
1	TA15082301	TO15_SFS.qgm	R1534870.qgd	250 mL	DO NOT USE		NA
2	CAPH-10STD10.0	TO15_SFS.qgm	R1534871.qgd	SS22-009B2 125mL	DO NOT USE		NA
3	CA15082301	TO15_SFS.qgm	R1534872.qgd	SS22-012F 250mL	TUNE		NA
4	CTO15-LLSTD10.0	TO15_SFS.qgm	R1534873.qgd	SS22-019A 250mL	STD NOT PREPARED CORRECTLY		NA
4	CTO15-SIMSTD5.0	TO15_SFS.qgm	R1534874.qgd	SS22-019A 125mL	DO NOT USE		NA
4	CTO15-LLSTD10.0	TO15_SFS.qgm	R1534875.qgd	SS22-015F 250mL	LL LCS		NA
4	CTO15-SIMSTD5.0	TO15_SFS.qgm	R1534876.qgd	SS22-015F 125mL	SIM LCS		NA
1	BA15082301	TO15_SFS.qgm	R1534877.qgd	250 mL	LL BLANK		NA
1	BA15082302	TO15_SFS.qgm	R1534878.qgd	250 mL	SIM BLANK		NA
2	L2244833-07D,3,168.27,250	TO15_SFS.qgm	R1534879.qgd	WG1678730,ICAL19226	111092	NY	Y
3	L2244833-01D,3,12.04,250	TO15_SFS.qgm	R1534880.qgd	WG1678730,ICAL19226	111TCA AND TCE OVERCAL	NY	Y
4	L2244833-02,3,250,250	TO15_SFS.qgm	R1534881.qgd	WG1678730,ICAL19226	111TCA OVERCAL	NY	Y
5	L2244833-03D,3,120.19,250	TO15_SFS.qgm	R1534882.qgd	WG1678730,ICAL19226	905; 111TCA OVERCAL	NY	Y
6	L2244833-04D,3,1.5,250	TO15_SFS.qgm	R1534883.qgd	WG1678730,ICAL19226	T	NY	Y
7	L2244833-05D,3,0.97,250	TO15_SFS.qgm	R1534884.qgd	WG1678730,ICAL19226	CIS12DCE OVERCAL	NY	Y
8	L2244833-06D,3,3.51,250	TO15_SFS.qgm	R1534885.qgd	WG1678730,ICAL19226	T	NY	Y
9	L2243234-01,3,250,250	TO15_SFS.qgm	R1534886.qgd	WG1678730,ICAL19226		NY	Y
10	L2243234-02D,3,125,250	TO15_SFS.qgm	R1534887.qgd	WG1678730,ICAL19226	T	NY	Y
11	L2243671-01,3,250,250	TO15_SFS.qgm	R1534888.qgd	WG1678730,ICAL19226		PA	Y
12	L2243671-02,3,250,250	TO15_SFS.qgm	R1534889.qgd	WG1678730,ICAL19226		PA	Y
13	L2243671-03,3,250,250	TO15_SFS.qgm	R1534890.qgd	WG1678730,ICAL19226		PA	Y
13	L2243671-03DUP,3,250,250	TO15_SFS.qgm	R1534891.qgd	WG1678730,ICAL19226	LL DUP	PA	Y

# Alpha Analytical Air Lab Instrument Run Log

14	L2243671-04D,3,12.26,250	TO15_SFS.qgm	R1534892.qgd	WG1678730,ICAL19226	4M2P OVERCAL	PA	Y
15	L2243671-05D,3,55,250	TO15_SFS.qgm	R1534893.qgd	WG1678730,ICAL19226	ACETONE AND 4M2P OVERCAL	PA	Y
16	L2243671-06D,3,35,250	TO15_SFS.qgm	R1534894.qgd	WG1678730,ICAL19226	T	PA	Y
4	L2244833-02D,3,25,250	TO15_SFS.qgm	R1534895.qgd	WG1678730,ICAL19226		111TCA	Y
5	L2244833-03D2,3,24.04250	TO15_SFS.qgm	R1534896.qgd	WG1678730,ICAL19226		111TCA	Y
7	L2244833-05D2,3,0.31,250	TO15_SFS.qgm	R1534897.qgd	WG1678730,ICAL19226		CIS12DCE	Y
14	L2243671-04D2,3,6.13,250	TO15_SFS.qgm	R1534898.qgd	WG1678730,ICAL19226		4M2P	Y
15	L2243671-05D2,3,15,250	TO15_SFS.qgm	R1534899.qgd	WG1678730,ICAL19226		ACETONE AND 4M2P	Y
3	L2244833-01D2,3,1.50,250	TO15_SFS.qgm	R1534900.qgd	WG1678730,ICAL19226		111TCA AND TCE	Y

**Date(s) of Initial Calibration:** Refer to Initial Calibration Summary Form 6

**Date Acquired:** see Instrument Performance Check Summary and/or quantitation report.

**Sample ID information:** L1301234-01,3,250,250 { Lab sample ID, dept #, actual

volume analyzed (mL), nominal volume analyzed (mL)}

**Dilution Factor:** See Form 1 report, or divide nominal volume by actual volume analyzed

**Alpha Analytical, Inc.**  
**Canister Dilution Worksheet**

\*N<sub>2</sub> = Nitrogen and H<sub>2</sub>= Hydrogen

**\*\* Dilution factor on this spreadsheet may differ from reported dilution factor (calculated by LIMs) due to different rounding rules.**

\*\*\* Reported to 2 decimal places unless 0.01 or less; then 3 decimal places are reported

## Analyst data input fields

#### **Analyst Comments:**

## ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Aug 25 2022, 10:51 am

Work Group: WG1678730 for Department: 3 GC/MS

Created: 23-AUG-22 Due: Operator: JB

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DU	PR	Location
L2243234-01	INFLUENT	S	TO15-LL	SOIL_VAPOR	DONE	U	0909	0825	S0	Can-6
L2243234-02	EFFLUENT	S	TO15-LL	SOIL_VAPOR	DONE	U	0909	0825	S0	Can-6
L2243671-01	SV-1	S	TO15-LL	SOIL_VAPOR	DONE	U	0910	0826	S0	Can-2.7
L2243671-02	SV-2	S	TO15-LL	SOIL_VAPOR	DONE	U	0910	0826	S0	Can-2.7
L2243671-03	SV-3	S	TO15-LL	SOIL_VAPOR	DONE	U	0910	0826	S0	Can-2.7
L2243671-04	SV-4	S	TO15-LL	SOIL_VAPOR	DONE	U	0910	0826	S0	Can-2.7
L2243671-05	SV-5	S	TO15-LL	SOIL_VAPOR	DONE	U	0910	0826	S0	Can-2.7
L2243671-06	SV-6	S	TO15-LL	SOIL_VAPOR	DONE	U	0910	0826	S0	Can-2.7
L2244833-01	SV-17	S	TO15-LL	SOIL_VAPOR	DONE	U	0917	0825	3E	Can-6
L2244833-02	SV-24	S	TO15-LL	SOIL_VAPOR	DONE	U	0917	0825	3E	Can-6
L2244833-03	SV-25	S	TO15-LL	SOIL_VAPOR	DONE	U	0917	0825	3E	Can-6
L2244833-04	SV-18	S	TO15-LL	SOIL_VAPOR	DONE	U	0917	0825	3E	Can-6
L2244833-05	SV-19	S	TO15-LL	SOIL_VAPOR	DONE	U	0917	0825	3E	Can-6
L2244833-06	SV-28	S	TO15-LL	SOIL_VAPOR	DONE	U	0917	0825	3E	Can-6
L2244833-07	AA-03	S	TO15-LL	AIR	DONE	U	0917	0825	3E	Can-6
WG1678730-1	MS BFB Tune Standard	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1678730-1	MS BFB Tune Standard	S	TO15-LL	AIR	DONE	U				
WG1678730-2	Continuing Calibrati	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1678730-2	Continuing Calibrati	S	TO15-LL	AIR	DONE	U				
WG1678730-3	Laboratory Control S	S	TO15-LL	AIR	DONE	U				
WG1678730-3	Laboratory Control S	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1678730-4	Laboratory Method Bl	S	TO15-LL	AIR	DONE	U				
WG1678730-4	Laboratory Method Bl	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1678730-5	Duplicate Sample	S	TO15-LL	AIR	DONE	U				
WG1678730-5	Duplicate Sample	S	TO15-LL	SOIL_VAPOR	DONE	U				



## Comments:

WG1678730-5 L2243671-03

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-01D	Date Collected	: 08/18/22 14:40
Client ID	: SV-17	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/23/22 19:25
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 20.76
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534880	Instrument ID	: AIRLAB15
Sample Amount	: 12.0 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	4.15	--	ND	20.5	--	U
74-87-3	Chloromethane	ND	4.15	--	ND	8.57	--	U
76-14-2	Freon-114	ND	4.15	--	ND	29.0	--	U
75-01-4	Vinyl chloride	ND	4.15	--	ND	10.6	--	U
106-99-0	1,3-Butadiene	ND	4.15	--	ND	9.18	--	U
74-83-9	Bromomethane	ND	4.15	--	ND	16.1	--	U
75-00-3	Chloroethane	ND	4.15	--	ND	11.0	--	U
64-17-5	Ethanol	ND	104	--	ND	196	--	U
593-60-2	Vinyl bromide	ND	4.15	--	ND	18.1	--	U
67-64-1	Acetone  	122 	20.8	--	290	49.4	--	
75-69-4	Trichlorofluoromethane	5.65	4.15	--	31.8	23.3	--	
67-63-0	Isopropanol	ND	10.4	--	ND	25.6	--	U
75-35-4	1,1-Dichloroethene	654	4.15	--	2590	16.5	--	
75-65-0	Tertiary butyl Alcohol 	10.7	10.4	--	32.4	31.5	--	
75-09-2	Methylene chloride	ND	10.4	--	ND	36.1	--	U
107-05-1	3-Chloropropene	ND	4.15	--	ND	13.0	--	U
75-15-0	Carbon disulfide 	4.94	4.15	--	15.4	12.9	--	
76-13-1	Freon-113	ND	4.15	--	ND	31.8	--	U
156-60-5	trans-1,2-Dichloroethene	25.3	4.15	--	100	16.5	--	
75-34-3	1,1-Dichloroethane	1980	4.15	--	8010	16.8	--	
1634-04-4	Methyl tert butyl ether	ND	4.15	--	ND	15.0	--	U
78-93-3	2-Butanone	17.7	10.4	--	52.2	30.7	--	
156-59-2	cis-1,2-Dichloroethene	1410	4.15	--	5590	16.5	--	
141-78-6	Ethyl Acetate	ND	10.4	--	ND	37.5	--	U
67-66-3	Chloroform	78.8	4.15	--	385	20.3	--	
109-99-9	Tetrahydrofuran	ND	10.4	--	ND	30.7	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-01D	Date Collected	: 08/18/22 14:40
Client ID	: SV-17	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/23/22 19:25
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 20.76
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534880	Instrument ID	: AIRLAB15
Sample Amount	: 12.0 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	4.15	--	ND	16.8	--	U
110-54-3	n-Hexane	87.3	4.15	--	308	14.6	--	
71-55-6	1,1,1-Trichloroethane	6430	4.15	--	35100	22.6	--	E
71-43-2	Benzene	4.44	4.15	--	14.2	13.3	--	
56-23-5	Carbon tetrachloride	ND	4.15	--	ND	26.1	--	U
110-82-7	Cyclohexane	5.11	4.15	--	17.6	14.3	--	
78-87-5	1,2-Dichloropropane	ND	4.15	--	ND	19.2	--	U
75-27-4	Bromodichloromethane	ND	4.15	--	ND	27.8	--	U
123-91-1	1,4-Dioxane	ND	4.15	--	ND	15.0	--	U
79-01-6	Trichloroethylene	2500	4.15	--	13400	22.3	--	E
540-84-1	2,2,4-Trimethylpentane	ND	4.15	--	ND	19.4	--	U
142-82-5	Heptane	33.7	4.15	--	138	17.0	--	
10061-01-5	cis-1,3-Dichloropropene	ND	4.15	--	ND	18.8	--	U
108-10-1	4-Methyl-2-pentanone	ND	10.4	--	ND	42.6	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	4.15	--	ND	18.8	--	U
79-00-5	1,1,2-Trichloroethane	ND	4.15	--	ND	22.6	--	U
108-88-3	Toluene	ND	4.15	--	ND	15.6	--	U
591-78-6	2-Hexanone	ND	4.15	--	ND	17.0	--	U
124-48-1	Dibromochloromethane	ND	4.15	--	ND	35.4	--	U
106-93-4	1,2-Dibromoethane	ND	4.15	--	ND	31.9	--	U
127-18-4	Tetrachloroethene	63.7	4.15	--	432	28.1	--	
108-90-7	Chlorobenzene	ND	4.15	--	ND	19.1	--	U
100-41-4	Ethylbenzene	ND	4.15	--	ND	18.0	--	U
179601-23-1	p/m-Xylene	ND	8.30	--	ND	36.1	--	U
75-25-2	Bromoform	ND	4.15	--	ND	42.9	--	U
100-42-5	Styrene	ND	4.15	--	ND	17.7	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

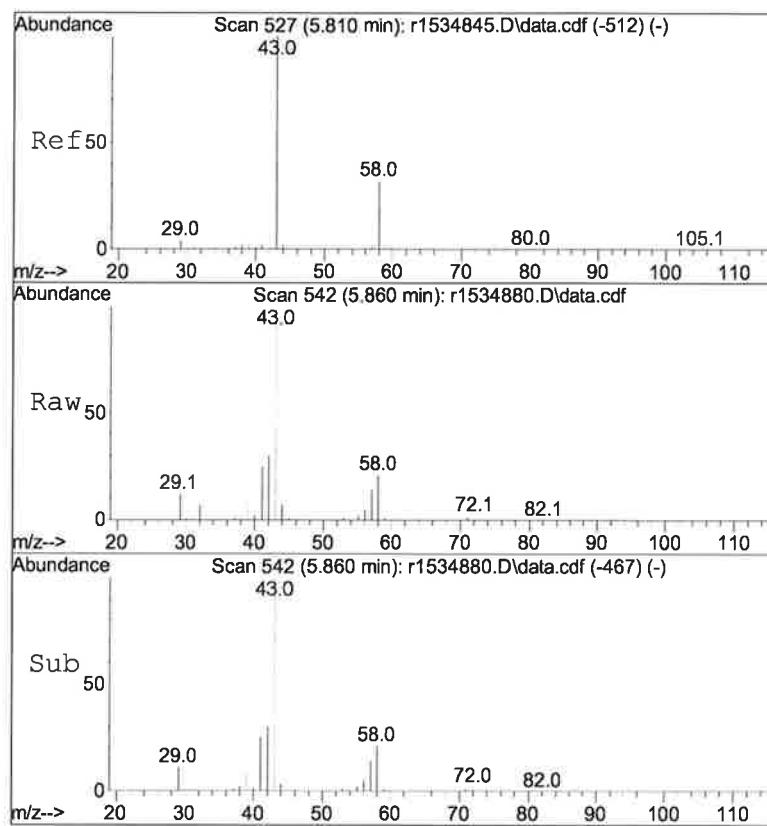
Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-01D	Date Collected	: 08/18/22 14:40
Client ID	: SV-17	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/23/22 19:25
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 20.76
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534880	Instrument ID	: AIRLAB15
Sample Amount	: 12.0 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.15	--	ND	28.5	--	U
95-47-6	o-Xylene	ND	4.15	--	ND	18.0	--	U
622-96-8	4-Ethyltoluene	ND	4.15	--	ND	20.4	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	4.15	--	ND	20.4	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	4.15	--	ND	20.4	--	U
100-44-7	Benzyl chloride	ND	4.15	--	ND	21.5	--	U
541-73-1	1,3-Dichlorobenzene	ND	4.15	--	ND	25.0	--	U
106-46-7	1,4-Dichlorobenzene	ND	4.15	--	ND	25.0	--	U
95-50-1	1,2-Dichlorobenzene	ND	4.15	--	ND	25.0	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	4.15	--	ND	30.8	--	U
87-68-3	Hexachlorobutadiene	ND	4.15	--	ND	44.3	--	U

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

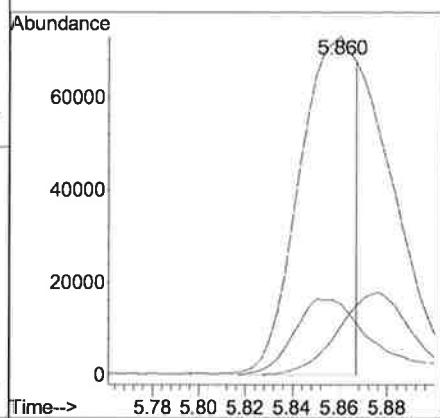
Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-01D2	Date Collected	: 08/18/22 14:40
Client ID	: SV-17	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/24/22 10:40
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 166.7
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534900	Instrument ID	: AIRLAB15
Sample Amount	: 1.50 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	6510	33.3	--	35500	182	--	
79-01-6	Trichloroethene	2260	33.3	--	12100	179	--	

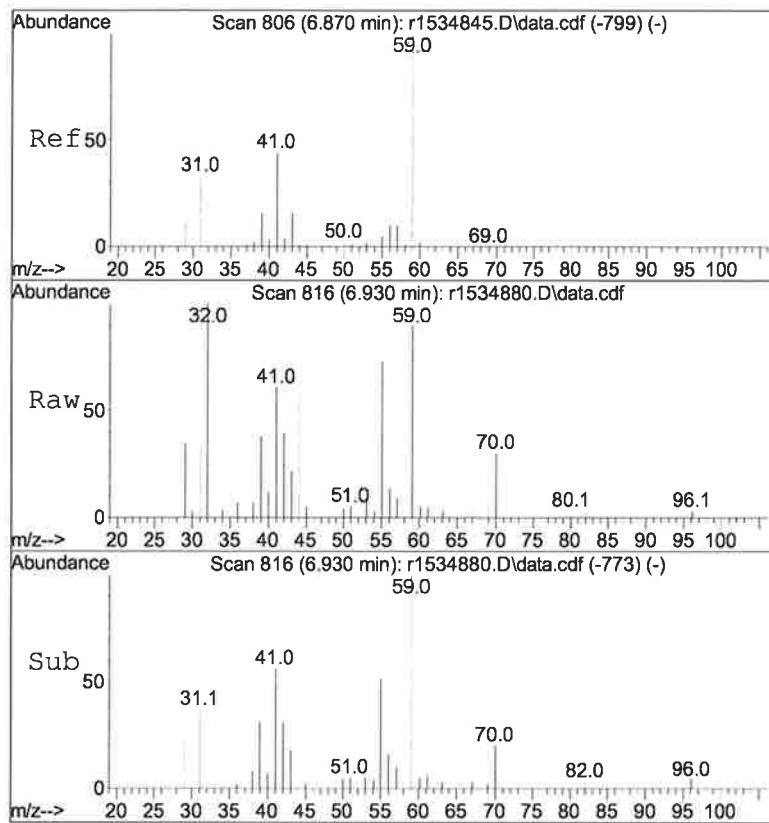


#19  
acetone  
Concen: 5.88 ppbV m  
RT: 5.860 min Scan# 542  
Delta R.T. 0.050 min  
Lab File: r1534880.D  
Acq: 23 Aug 2022 7:25 PM

Tgt Ion:	43	Resp:	120703
Ion Ratio		Lower	Upper
43	100		
58	21.1	25.3	37.9#
57	14.0	0.7	1.1#

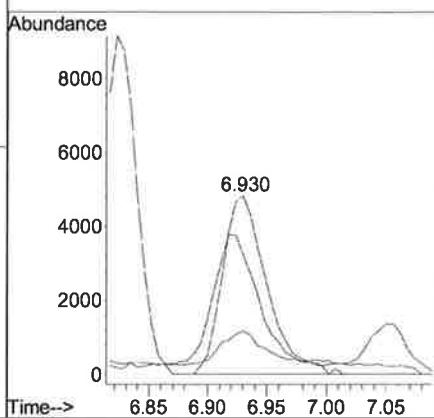


N = Out of Criteria  
run refra

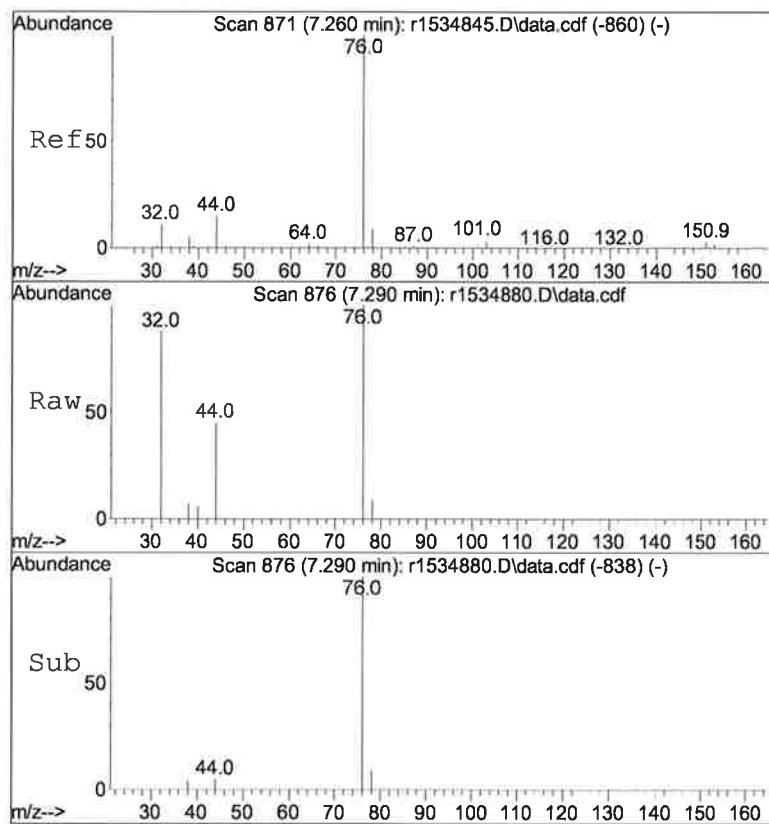


#27  
 tertiary butyl alcohol  
 Concen: 0.52 ppbV  
 RT: 6.930 min Scan# 816  
 Delta R.T. 0.060 min ✓  
 Lab File: r1534880.D  
 Acq: 23 Aug 2022 7:25 PM

Tgt Ion:	59	Ion Ratio:	12514
		Lower	Upper
59	100		
41	67.1	35.3	52.9# —
43	24.3	12.6	18.8# —

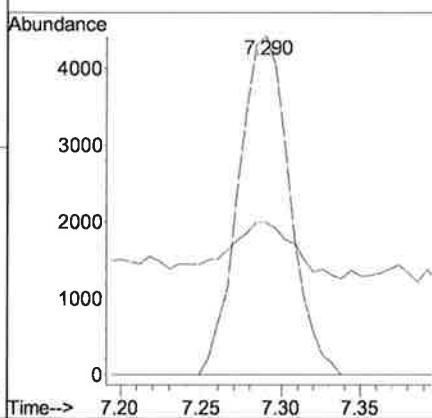


N - out of column  
 ratio. Interferents  
~~make it difficult~~  
 to compare spectra to  
 REF

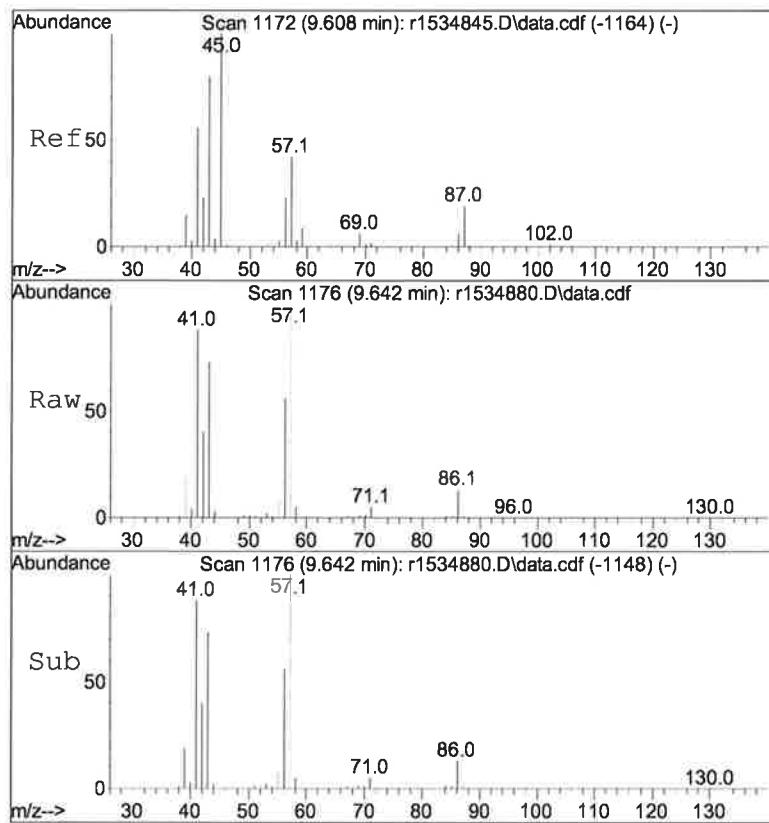


# 30  
 carbon disulfide  
 Concen: 0.24 ppbV  
 RT: 7.290 min Scan# 876  
 Delta R.T. 0.030 min ✓  
 Lab File: r1534880.D  
 Acq: 23 Aug 2022 7:25 PM

Tgt Ion: 76 Resp: 9882  
 Ion Ratio Lower Upper  
 76 100  
 44 45.0 12.4 18.6# —

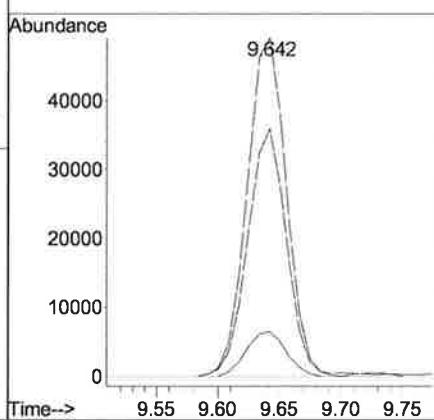


N = Out of column ratio,  
 cannot discern peaks in  
 graph ↑



# 44  
hexane  
Concen: 4.21 ppbV  
RT: 9.642 min Scan# 1176  
Delta R.T. 0.033 min ✓  
Lab File: r1534880.D  
Acq: 23 Aug 2022 7:25 PM

Tgt Ion:	Ion Ratio	Lower	Upper
57	100		
43	73.1	150.6	226.0# ✓
86	13.2	11.3	16.9 ✓



✓ - out of column  
C18

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : GZA GeoEnvironmental, Inc.  
Project Name : 101 E 150TH ST RI  
Lab ID : L2244833-02  
Client ID : SV-24  
Sample Location :  
Sample Matrix : SOIL\_VAPOR  
Analytical Method : 48,TO-15  
Lab File ID : R1534881  
Sample Amount : 250 ml

✓  
Lab Number : L2244833  
Project Number : 41.0162951.10  
Date Collected : 08/18/22 14:50  
Date Received : 08/18/22  
Date Analyzed : 08/23/22 20:05  
Dilution Factor : 1  
Analyst : TS  
Instrument ID : AIRLAB15  
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.628	0.200	--	3.11	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene N	3.63	0.200	--	8.03	0.442	--	
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	8.42	5.00	--	15.9	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	102	1.00	--	242	2.38	--	
75-69-4	Trichlorofluoromethane	0.689	0.200	--	3.87	1.12	--	
67-63-0	Isopropanol	2.78	0.500	--	6.83	1.23	--	
75-35-4	1,1-Dichloroethene	0.582	0.200	--	2.31	0.793	--	
75-65-0	Tertiary butyl Alcohol	22.3	0.500	--	67.6	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide N	3.37	0.200	--	10.5	0.623	--	
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	5.80	0.200	--	23.5	0.809	--	
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	36.1	0.500	--	106	1.47	--	
156-59-2	cis-1,2-Dichloroethene	5.97	0.200	--	23.7	0.793	--	
141-78-6	Ethyl Acetate	0.627	0.500	--	2.26	1.80	--	
67-66-3	Chloroform	0.349	0.200	--	1.70	0.977	--	
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-02	Date Collected	: 08/18/22 14:50
Client ID	: SV-24	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/23/22 20:05
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534881	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	47.1	0.200	--	166	0.705	--	
71-55-6	1,1,1-Trichloroethane	451	0.200	--	2460	1.09	--	E
71-43-2	Benzene	3.50	0.200	--	11.2	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	3.55	0.200	--	12.2	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethylene	2.40	0.200	--	12.9	1.07	--	
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	8.37	0.200	--	34.3	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	4.19	0.200	--	15.8	0.754	--	
591-78-6	2-Hexanone	3.27	0.200	--	13.4	0.820	--	
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	20.3	0.200	--	138	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.725	0.200	--	3.15	0.869	--	
179601-23-1	p/m-Xylene	2.16	0.400	--	9.38	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.218	0.200	--	0.928	0.852	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-02	Date Collected	: 08/18/22 14:50
Client ID	: SV-24	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/23/22 20:05
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534881	Instrument ID	: AIRLAB15
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.864	0.200	--	3.75	0.869	--	
622-96-8	4-Ethyltoluene	0.228	0.200	--	1.12	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.324	0.200	--	1.59	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	1.20	0.200	--	5.90	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

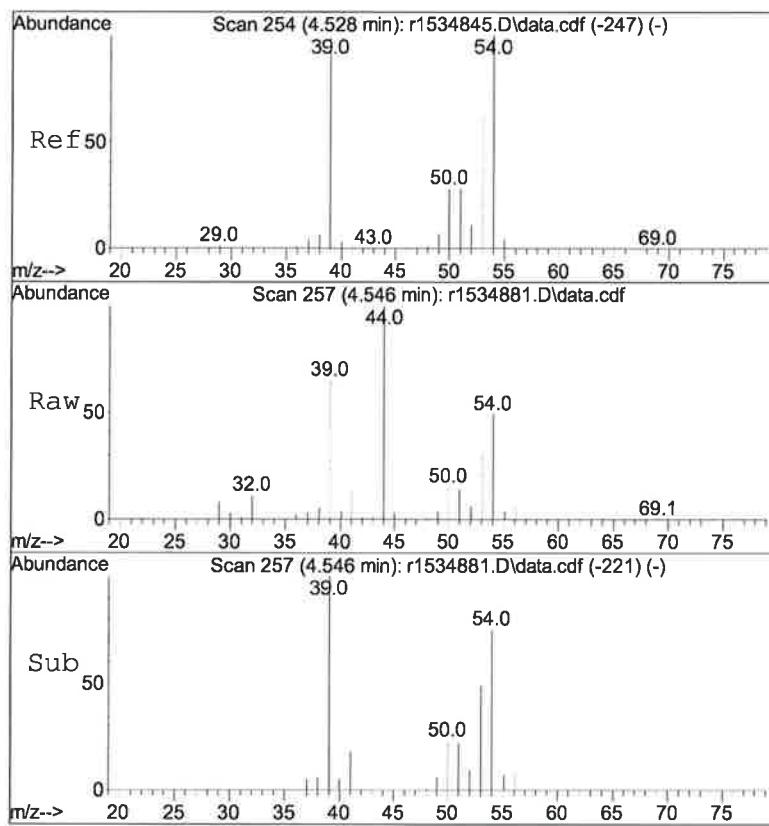


**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-02D	Date Collected	: 08/18/22 14:50
Client ID	: SV-24	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/24/22 07:41
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 10
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534895	Instrument ID	: AIRLAB15
Sample Amount	: 25.0 ml	GC Column	: RTX-1

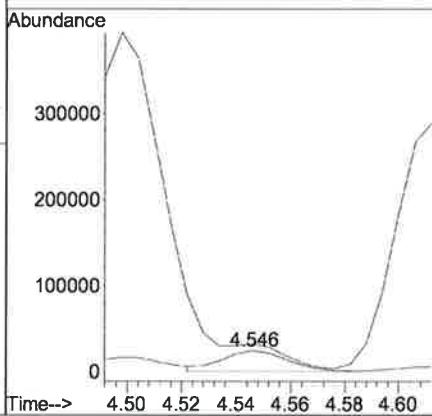
CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	580	2.00	--	3160	10.9	--	





#10  
 1,3-butadiene  
 Concen: 3.63 ppbV  
 RT: 4.546 min Scan# 257  
 Delta R.T. 0.018 min ✓  
 Lab File: r1534881.D  
 Acq: 23 Aug 2022 8:05 PM

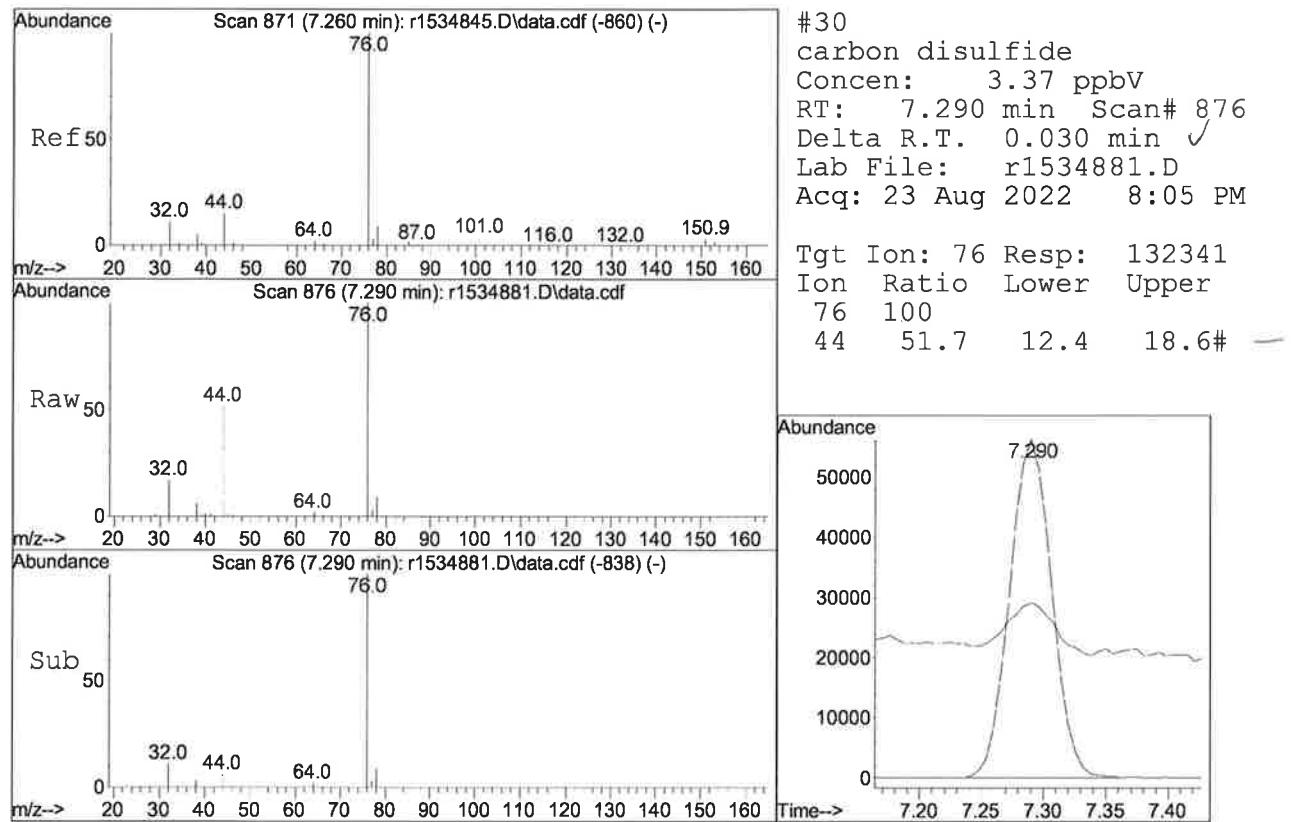
Tgt	Ion:	54	Resp:	39885
Ion	Ratio		Lower	Upper
54	100			
39	134.3		79.8	119.6#



N - out of criteria

~~ratio~~ ratio. Can't

draw graph penLs ↗

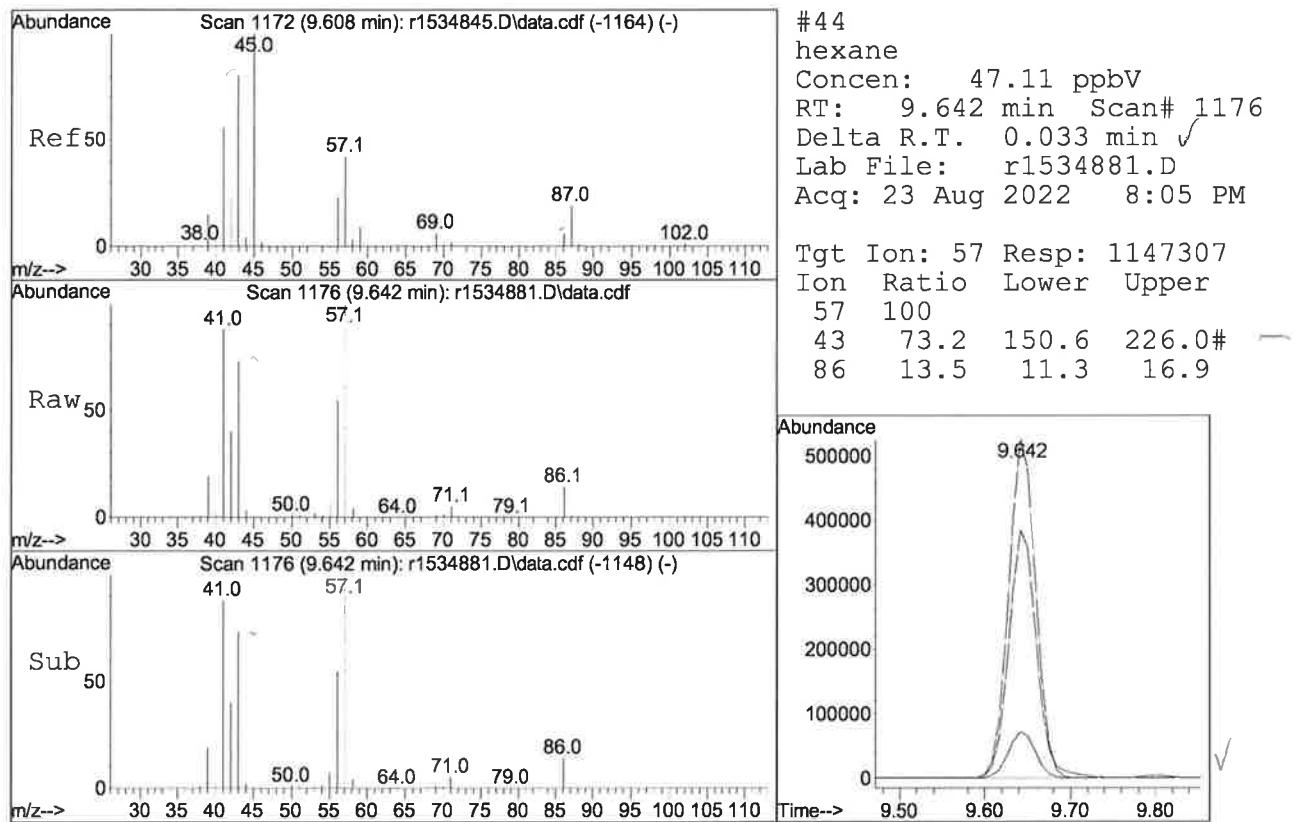


N - out of criteria

ratio, (cannot assign)

Secondary peak in

graph ↑



N - out of criteria  
✓

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : GZA GeoEnvironmental Inc.  
 Project Name : 101 E 150TH ST RI  
 Lab ID : L2244833-03D  
 Client ID : SV-25  
 Sample Location :  
 Sample Matrix : SOIL\_VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1534882  
 Sample Amount : 120 ml

Lab Number : L2244833  
 Project Number : 41.0162951.10  
 Date Collected : 08/18/22 15:00  
 Date Received : 08/18/22  
 Date Analyzed : 08/23/22 20:45  
 Dilution Factor : 2.08  
 Analyst : TS  
 Instrument ID : AIRLAB15  
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.599	0.416	--	2.96	2.06	--	
74-87-3	Chloromethane	0.416	0.416	--	0.859	0.859	--	
76-14-2	Freon-114	0.503	0.416	--	3.52	2.91	--	
75-01-4	Vinyl chloride	ND	0.416	--	ND	1.06	--	U
106-99-0	1,3-Butadiene <span style="color: pink;">N</span>	0.755 <span style="color: pink;">O</span>	0.416	--	1.67	0.920	--	
74-83-9	Bromomethane	ND	0.416	--	ND	1.62	--	U
75-00-3	Chloroethane	ND	0.416	--	ND	1.10	--	U
64-17-5	Ethanol	14.5	10.4	--	27.3	19.6	--	
593-60-2	Vinyl bromide	ND	0.416	--	ND	1.82	--	U
67-64-1	Acetone	87.8	2.08	--	209	4.94	--	
75-69-4	Trichlorofluoromethane	ND	0.416	--	ND	2.34	--	U
67-63-0	Isopropanol	3.81	1.04	--	9.37	2.56	--	
75-35-4	1,1-Dichloroethene	1.42	0.416	--	5.63	1.65	--	
75-65-0	Tertiary butyl Alcohol	39.6	1.04	--	120	3.15	--	
75-09-2	Methylene chloride	ND	1.04	--	ND	3.61	--	U
107-05-1	3-Chloropropene	ND	0.416	--	ND	1.30	--	U
75-15-0	Carbon disulfide <span style="color: pink;">N</span>	0.984	0.416	--	3.06	1.30	--	
76-13-1	Freon-113	ND	0.416	--	ND	3.19	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.416	--	ND	1.65	--	U
75-34-3	1,1-Dichloroethane	19.6	0.416	--	79.3	1.68	--	
1634-04-4	Methyl tert butyl ether	ND	0.416	--	ND	1.50	--	U
78-93-3	2-Butanone	79.5	1.04	--	234	3.07	--	
156-59-2	cis-1,2-Dichloroethene	0.474	0.416	--	1.88	1.65	--	
141-78-6	Ethyl Acetate <span style="color: pink;">N</span>	1.23	1.04	--	4.43	3.75	--	
67-66-3	Chloroform	21.9	0.416	--	107	2.03	--	
109-99-9	Tetrahydrofuran	ND	1.04	--	ND	3.07	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-03D	Date Collected	: 08/18/22 15:00
Client ID	: SV-25	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/23/22 20:45
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 2.08
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534882	Instrument ID	: AIRLAB15
Sample Amount	: 120 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.416	--	ND	1.68	--	U
110-54-3	n-Hexane <span style="color: purple;">N</span>	79.1	0.416	--	279	1.47	--	
71-55-6	1,1,1-Trichloroethane	411	0.416	--	2240	2.27	--	E
71-43-2	Benzene	1.32	0.416	--	4.22	1.33	--	
56-23-5	Carbon tetrachloride	ND	0.416	--	ND	2.62	--	U
110-82-7	Cyclohexane	1.91 <span style="color: pink;">O</span>	0.416	--	6.57	1.43	--	
78-87-5	1,2-Dichloropropane	ND	0.416	--	ND	1.92	--	U
75-27-4	Bromodichloromethane	ND	0.416	--	ND	2.79	--	U
123-91-1	1,4-Dioxane	ND	0.416	--	ND	1.50	--	U
79-01-6	Trichloroethylene	22.9	0.416	--	123	2.24	--	
540-84-1	2,2,4-Trimethylpentane	0.909	0.416	--	4.25	1.94	--	
142-82-5	Heptane	13.2	0.416	--	54.1	1.70	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.416	--	ND	1.89	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.04	--	ND	4.26	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.416	--	ND	1.89	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.416	--	ND	2.27	--	U
108-88-3	Toluene	3.55	0.416	--	13.4	1.57	--	
591-78-6	2-Hexanone	ND	0.416	--	ND	1.70	--	U
124-48-1	Dibromochloromethane	ND	0.416	--	ND	3.54	--	U
106-93-4	1,2-Dibromoethane	ND	0.416	--	ND	3.20	--	U
127-18-4	Tetrachloroethene	18.9 <span style="color: pink;">O</span>	0.416	--	128	2.82	--	
108-90-7	Chlorobenzene	ND	0.416	--	ND	1.92	--	U
100-41-4	Ethylbenzene	1.15	0.416	--	5.00	1.81	--	
179601-23-1	p/m-Xylene	4.09	0.832	--	17.8	3.61	--	
75-25-2	Bromoform	ND	0.416	--	ND	4.30	--	U
100-42-5	Styrene	ND	0.416	--	ND	1.77	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : GZA GeoEnvironmental, Inc.	Lab Number : L2244833
Project Name : 101 E 150TH ST RI	Project Number : 41.0162951.10
Lab ID : L2244833-03D	Date Collected : 08/18/22 15:00
Client ID : SV-25	Date Received : 08/18/22
Sample Location :	Date Analyzed : 08/23/22 20:45
Sample Matrix : SOIL_VAPOR	Dilution Factor : 2.08
Analytical Method : 48,TO-15	Analyst : TS
Lab File ID : R1534882	Instrument ID : AIRLAB15
Sample Amount : 120 ml	GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.416	--	ND	2.86	--	U
95-47-6	o-Xylene	1.94	0.416	--	8.43	1.81	--	
622-96-8	4-Ethyltoluene	ND	0.416	--	ND	2.05	--	U
108-67-8	1,3,5-Trimethylbenzene	0.543	0.416	--	2.67	2.05	--	
95-63-6	1,2,4-Trimethylbenzene	1.24	0.416	--	6.10	2.05	--	
100-44-7	Benzyl chloride	ND	0.416	--	ND	2.15	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.416	--	ND	2.50	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.416	--	ND	2.50	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.416	--	ND	2.50	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.416	--	ND	3.09	--	U
87-68-3	Hexachlorobutadiene	ND	0.416	--	ND	4.44	--	U



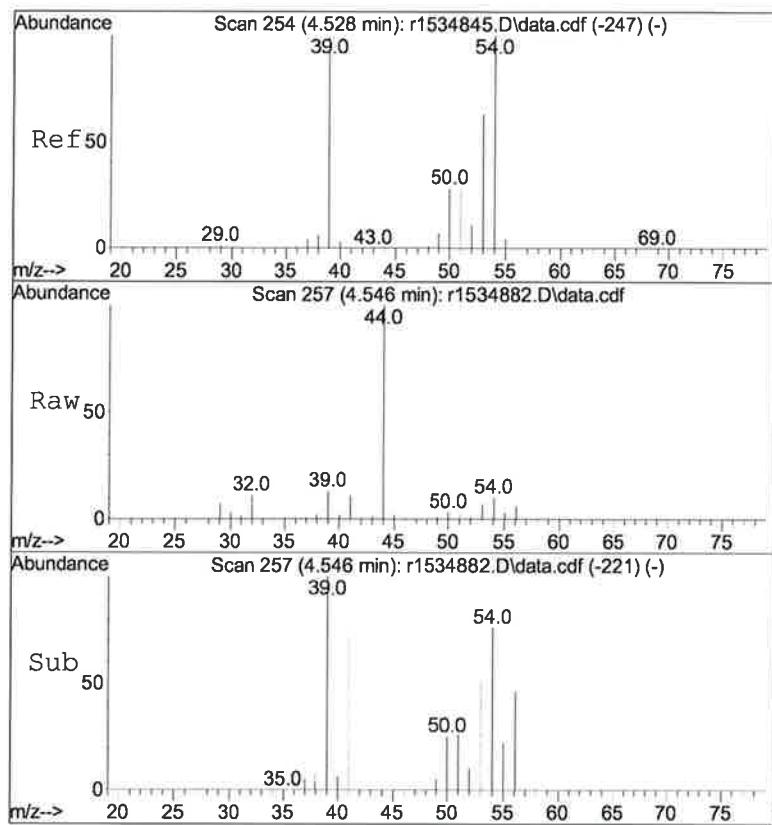
**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : GZA GeoEnvironmental, Inc.  
 Project Name : 101 E 150TH ST RI  
 Lab ID : L2244833-03D2  
 Client ID : SV-25  
 Sample Location :   
 Sample Matrix : SOIL\_VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1534896  
 Sample Amount : 24.0 ml

Lab Number : L2244833  
 Project Number : 41.0162951.10  
 Date Collected : 08/18/22 15:00  
 Date Received : 08/18/22  
 Date Analyzed : 08/24/22 08:17  
 Dilution Factor : 10.4  
 Analyst : TS  
 Instrument ID : AIRLAB15  
 GC Column : RTX-1

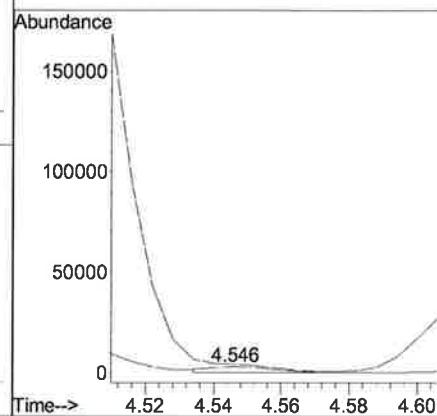
CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
71-55-6	1,1,1-Trichloroethane	537	2.08	--	2930	11.3	--	



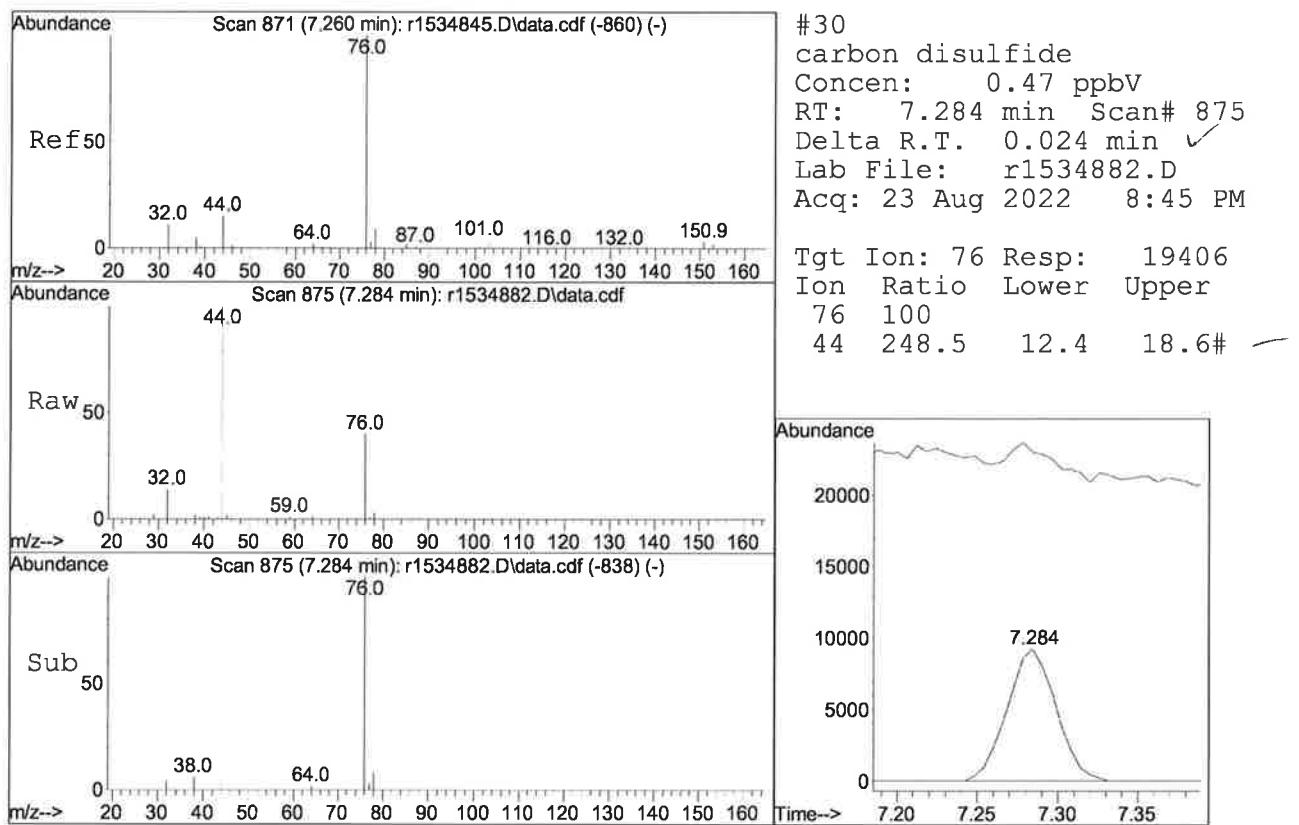


#10  
1,3-butadiene  
Concen: 0.36 ppbV  
RT: 4.546 min Scan# 257  
Delta R.T. 0.018 min ✓  
Lab File: r1534882.D  
Acq: 23 Aug 2022 8:45 PM

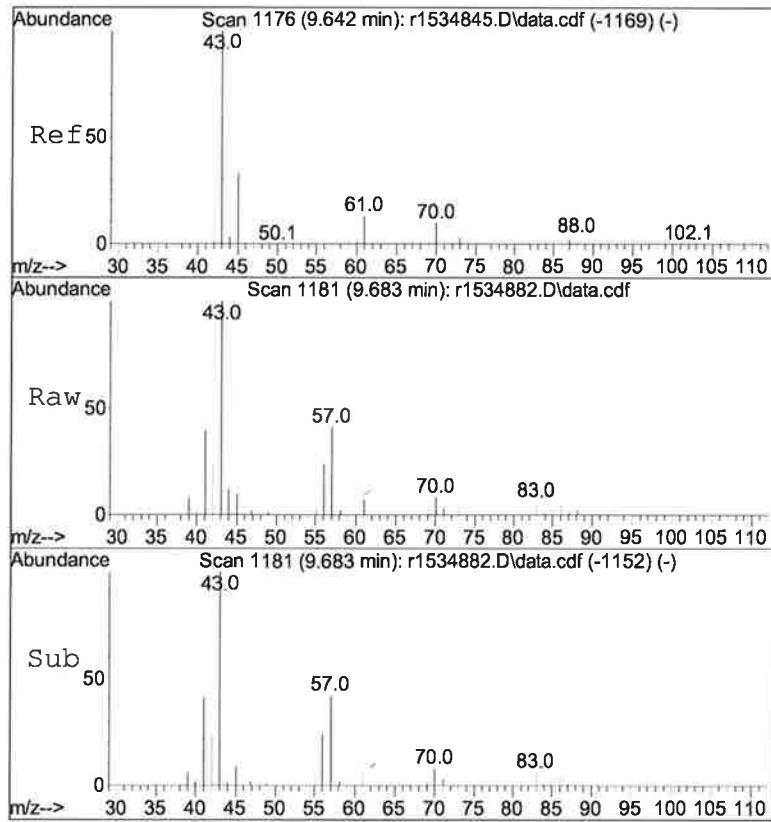
Tgt	Ion:	54	Resp:	4163
Ion	Ratio	Lower	Upper	
54	100			
39	131.6	79.8	119.6	# -



N - out of  
control for  
false & cannot  
discern penalty in  
group ↑

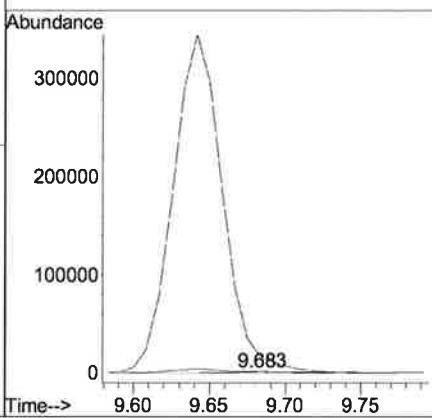


N — out of  
Criteria ratio &  
Count down second  
peak in graph ↑

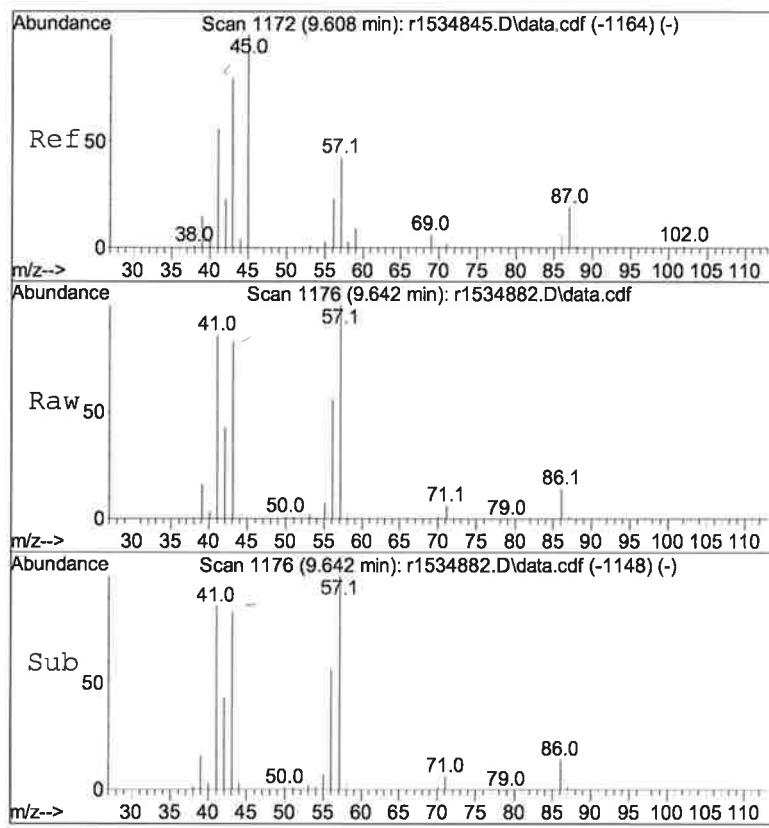


#38  
 Ethyl Acetate  
 Concen: 0.59 ppbV  
 RT: 9.683 min Scan# 1181  
 Delta R.T. 0.042 min ✓  
 Lab File: r1534882.D  
 Acq: 23 Aug 2022 8:45 PM

Tgt	Ion:	61	Resp:	3073
Ion	Ratio		Lower	Upper
61	100			
70	107.2	66.2	99.4#	—
43	1341.2	744.0	1116.0#	—

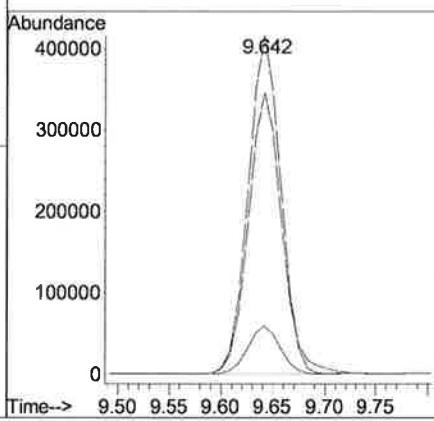


N - Out of control  
 for ratio + control  
 discern peaks in  $\eta_{pp} \uparrow$



#44  
hexane  
Concen: 38.02 ppbV  
RT: 9.642 min Scan# 1176  
Delta R.T. 0.033 min ✓  
Lab File: r1534882.D  
Acq: 23 Aug 2022 8:45 PM

Tgt Ion:	57	Ion Ratio:	904635
		Lower	Upper
57	100		
43	83.1	150.6	226.0#
86	14.1	11.3	16.9 ✓



N = out of retention  
PANO ✓

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : GZA GeoEnvironmental, Inc.  
 Project Name : 101 E 150TH ST RI  
 Lab ID : L2244833-06D ✓  
 Client ID : SV-28  
 Sample Location :  
 Sample Matrix : SOIL\_VAPOR  
 Analytical Method : 48,TO-15  
 Lab File ID : R1534885  
 Sample Amount : 3.51 ml

Lab Number : L2244833  
 Project Number : 41.0162951.10  
 Date Collected : 08/18/22 14:55  
 Date Received : 08/18/22  
 Date Analyzed : 08/23/22 22:35  
 Dilution Factor : 71.23  
 Analyst : TS  
 Instrument ID : AIRLAB15  
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	14.2	--	ND	70.2	--	U
74-87-3	Chloromethane	ND	14.2	--	ND	29.3	--	U
76-14-2	Freon-114	ND	14.2	--	ND	99.3	--	U
75-01-4	Vinyl chloride	ND	14.2	--	ND	36.3	--	U
106-99-0	1,3-Butadiene	ND	14.2	--	ND	31.4	--	U
74-83-9	Bromomethane	ND	14.2	--	ND	55.1	--	U
75-00-3	Chloroethane	ND	14.2	--	ND	37.5	--	U
64-17-5	Ethanol	ND	356	--	ND	671	--	U
593-60-2	Vinyl bromide	ND	14.2	--	ND	62.1	--	U
67-64-1	Acetone	ND	71.2	--	ND	169	--	U
75-69-4	Trichlorofluoromethane	ND	14.2	--	ND	79.8	--	U
67-63-0	Isopropanol	ND	35.6	--	ND	87.5	--	U
75-35-4	1,1-Dichloroethene	147	14.2	--	583	56.3	--	
75-65-0	Tertiary butyl Alcohol	ND	35.6	--	ND	108	--	U
75-09-2	Methylene chloride	ND	35.6	--	ND	124.	--	U
107-05-1	3-Chloropropene	ND	14.2	--	ND	44.4	--	U
75-15-0	Carbon disulfide	ND	14.2	--	ND	44.2	--	U
76-13-1	Freon-113	ND	14.2	--	ND	109.	--	U
156-60-5	trans-1,2-Dichloroethene	ND	14.2	--	ND	56.3	--	U
75-34-3	1,1-Dichloroethane	49.8	14.2	--	202	57.5	--	
1634-04-4	Methyl tert butyl ether	ND	14.2	--	ND	51.2	--	U
78-93-3	2-Butanone	ND	35.6	--	ND	105	--	U
156-59-2	cis-1,2-Dichloroethene	ND	14.2	--	ND	56.3	--	U
141-78-6	Ethyl Acetate	ND	35.6	--	ND	128.	--	U
67-66-3	Chloroform	20.8	14.2	--	102	69.3	--	
109-99-9	Tetrahydrofuran	ND	35.6	--	ND	105.	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-06D	Date Collected	: 08/18/22 14:55
Client ID	: SV-28	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/23/22 22:35
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 71.23
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534885	Instrument ID	: AIRLAB15
Sample Amount	: 3.51 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier	
		Results	RL	MDL	Results	RL	MDL		
107-06-2	1,2-Dichloroethane	ND	14.2	--	ND	57.5	--	U	
110-54-3	n-Hexane	N	85.2	○	14.2	--	300	50.0	--
71-55-6	1,1,1-Trichloroethane	4870	○	14.2	--	26600	77.5	--	
71-43-2	Benzene	ND	14.2	--	ND	45.4	--	U	
56-23-5	Carbon tetrachloride	ND	14.2	--	ND	89.3	--	U	
110-82-7	Cyclohexane	ND	14.2	--	ND	48.9	--	U	
78-87-5	1,2-Dichloropropane	ND	14.2	--	ND	65.6	--	U	
75-27-4	Bromodichloromethane	ND	14.2	--	ND	95.1	--	U	
123-91-1	1,4-Dioxane	ND	14.2	--	ND	51.2	--	U	
79-01-6	Trichloroethylene	814	14.2	--	4370	76.3	--		
540-84-1	2,2,4-Trimethylpentane	ND	14.2	--	ND	66.3	--	U	
142-82-5	Heptane	ND	14.2	--	ND	58.2	--	U	
10061-01-5	cis-1,3-Dichloropropene	ND	14.2	--	ND	64.5	--	U	
108-10-1	4-Methyl-2-pentanone	ND	35.6	--	ND	146.	--	U	
10061-02-6	trans-1,3-Dichloropropene	ND	14.2	--	ND	64.5	--	U	
79-00-5	1,1,2-Trichloroethane	ND	14.2	--	ND	77.5	--	U	
108-88-3	Toluene	ND	14.2	--	ND	53.5	--	U	
591-78-6	2-Hexanone	ND	14.2	--	ND	58.2	--	U	
124-48-1	Dibromochloromethane	ND	14.2	--	ND	121.	--	U	
106-93-4	1,2-Dibromoethane	ND	14.2	--	ND	109.	--	U	
127-18-4	Tetrachloroethene	3430	○	14.2	--	23300	96.3	--	
108-90-7	Chlorobenzene	ND	14.2	--	ND	65.4	--	U	
100-41-4	Ethylbenzene	ND	14.2	--	ND	61.7	--	U	
179601-23-1	p/m-Xylene	ND	28.5	--	ND	124	--	U	
75-25-2	Bromoform	ND	14.2	--	ND	147.	--	U	
100-42-5	Styrene	ND	14.2	--	ND	60.5	--	U	

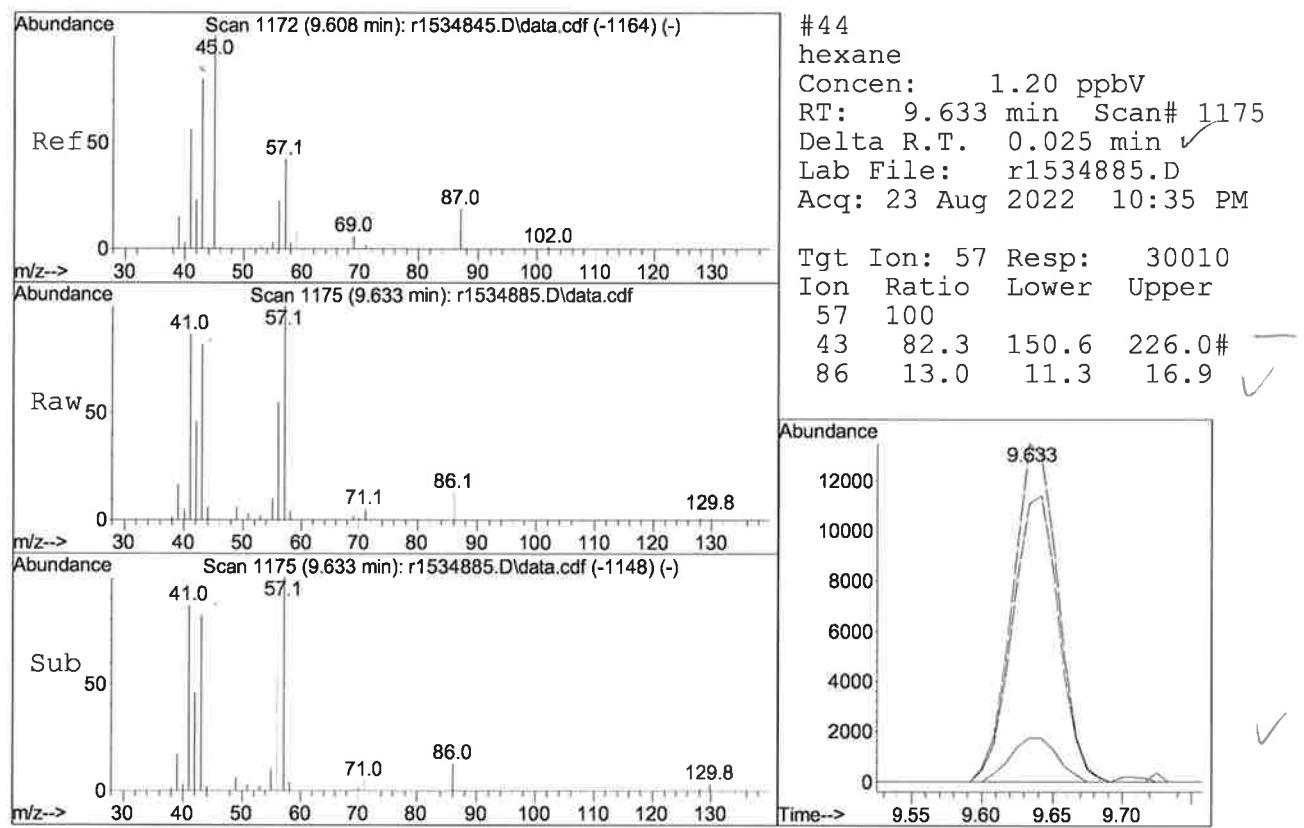


**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: GZA GeoEnvironmental, Inc.	Lab Number	: L2244833
Project Name	: 101 E 150TH ST RI	Project Number	: 41.0162951.10
Lab ID	: L2244833-06D	Date Collected	: 08/18/22 14:55
Client ID	: SV-28	Date Received	: 08/18/22
Sample Location	:	Date Analyzed	: 08/23/22 22:35
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 71.23
Analytical Method	: 48,TO-15	Analyst	: TS
Lab File ID	: R1534885	Instrument ID	: AIRLAB15
Sample Amount	: 3.51 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	14.2	--	ND	97.5	--	U
95-47-6	o-Xylene	ND	14.2	--	ND	61.7	--	U
622-96-8	4-Ethyltoluene	ND	14.2	--	ND	69.8	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	14.2	--	ND	69.8	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	14.2	--	ND	69.8	--	U
100-44-7	Benzyl chloride	ND	14.2	--	ND	73.5	--	U
541-73-1	1,3-Dichlorobenzene	ND	14.2	--	ND	85.4	--	U
106-46-7	1,4-Dichlorobenzene	ND	14.2	--	ND	85.4	--	U
95-50-1	1,2-Dichlorobenzene	ND	14.2	--	ND	85.4	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	14.2	--	ND	105.	--	U
87-68-3	Hexachlorobutadiene	ND	14.2	--	ND	151.	--	U





w - out of  
criteria sub.

**B. SAMPLE DELIVERY GROUP GCJ63027**

## ORGANIC ANALYSIS SUPPORT DOCUMENTATION

Client Name: GZA GeoEnvironmental of New York  
 Site/Project Name: 2022 DUSR BCP Bronx  
 Job Number/Task/Subtask: PROJ-021403 Ambient/Indoor Air Report  
 Laboratory/Location: Phoenix Inc.  
 SDG: GCJ63027  
 Sample Collection Dates: 10/21/21

EnvStd Project Manager: STZ  
 Reviewed by: JAB  
 Approved by:  
 Completion Date: 10/24/22  
 Validation Level: 4

The following table indicates criteria that were examined, the identified problems, and support documentation attachments.

Parameter/ Method	Criteria Examined in Detail							Problems Identified													
	Note: All items examined have been included in the Support Document unless otherwise noted.																				
	Check (✓) if Yes or Footnote Letter for Comments Below																				
	TO-15								TO-15												
Condition upon Receipt	X																				
Sample Preservation	X																				
Holding Times	X																				
Blank Analysis Results	X																				
Surrogates	X																				
Laboratory Control Sample	X																				
Matrix Spike/Matrix Spike Duplicate																					
Laboratory Duplicate	X																				
Field Duplicate																					
Sample Preparation	X																				
Detection Limit/Sensitivity	X																				
Mass Tuning	X																				
GC Instrument Performance – Resolution Checks and DDT/Endrin Breakdown																					
Initial Calibrations	X																				
Continuing Calibrations	X								X												
Internal Standard Performance	X																				
Retention Time Shifts	X																				
Quantitation of Results	X																				
Qualitative Identification: Targets	X								X												
Qualitative Identification: TICs																					
Multiple Dilutions/Analyses	X																				
Analytical Sequence	X																				
GC Column Agreement																					
Manual Integration																					
Percent Solids																					
Extract Cleanup Documentation, Checks, and Calibrations																					
Deliverable was Complete	X								X												
Others:																					

**Comments:** Qualitative Identification, Quantitation of Results, and Manual Integrations are not included in the Support Documentation unless a problem was identified.

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## BLANK ANALYSIS RESULTS FOR ORGANIC PARAMETERS

1 - V = Volatile; S = Semivolatile; P = Pesticide/PCB; O = Other:

2 - MB = Method Blank; TB = Trip Blank; EB = Equipment Blank; FB = Field Blank;  
IB = Instrument Blank; SB = Storage Blank

## Notes:

2C  
AIR SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No.:  SDG: GCJ63027

QC Batch Id: 597419 QC Sample Id: CJ61772

CLIENT ID	LAB ID	SMC1 BFB #				TOT OUT
01 CJ61772 LCS	CJ61772 LCS	97				0
02 CJ61772 QC	CJ61772 QC	100				0
03 61772 dup	CJ61772 DUP	99				0
04 CJ61772 BLANK	CJ61772 BLANK	94				0
05 IA-3	CJ63027	101				0
06 SV-4 5X	CJ63028 5X	98				0
07 SV-5 5X	CJ63029 5X	103				0
08 SV-6 5X	CJ63031 5X	102				0
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SMC1      BFB

Bromofluorobenzene

QC LIMITS  
(70-130)

# Column to be used to flag recovery values  
 \* Values outside of contract required QC limits  
 D Surrogate diluted out

FORM II AIR

2C  
AIR SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No.:  SDG: GCJ63027

QC Batch Id: 597799 QC Sample Id: CJ63030

CLIENT ID	LAB ID	SMC1 BFB #				TOT OUT
01 CJ63030 LCS	CJ63030 LCS	96				0
02 CJ63030 BLANK	CJ63030 BLANK	98				0
03 IA-2	CJ63030	101				0
04 IA-2 DUP	CJ63030 DUP	100				0
05 SV-4 15X	CJ63028 15X	97				0
06 SV-5 160X	CJ63029 160X	98				0
07 SV-5 800X	CJ63029 800X	96				0
08 SV-6 15X	CJ63031 15X	99				0
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SMC1      BFB

Bromofluorobenzene

QC LIMITS  
(70-130)

# Column to be used to flag recovery values  
 \* Values outside of contract required QC limits  
 D Surrogate diluted out

FORM II AIR

2C  
AIR SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No.:  SDG: GCJ63027

QC Batch Id: 597895 QC Sample Id: CJ63844

CLIENT ID	LAB ID	SMC1 BFB #				TOT OUT
01 CJ63844 LCS	CJ63844 LCS	101				0
02 CJ63844 BLANK	CJ63844 BLANK	97				0
03 SV-4 30X	CJ63028 30X	100				0
04 CJ63844 QC	CJ63844 QC	99				0
05 63844 dup	CJ63844 DUP	99				0
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SMC1      BFB

Bromofluorobenzene

QC LIMITS  
(70-130)

# Column to be used to flag recovery values  
 \* Values outside of contract required QC limits  
 D Surrogate diluted out

FORM II AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No:  SAS No:  SDG No GCJ63027

LCS - Client Id: CJ61772 LCS

COMPOUND	SPIKE ADDED (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Propylene	10	11.57	116	70 130
Dichlorodifluoromethane	10	11.72	117	70 130
Chloromethane	10	12.40	124	70 130
1,2-Dichlorotetrafluoroethane	10	11.58	116	70 130
Vinyl Chloride	10	11.21	112	70 130
1,3-Butadiene	10	10.84	108	70 130
Bromomethane	10	9.600	96	70 130
Chloroethane	10	9.920	99	70 130
Ethanol	5	5.062	101	70 130
Acetone	10	11.33	113	70 130
Trichlorofluoromethane	10	11.44	114	70 130
Isopropylalcohol	7	6.521	93	70 130
Acrylonitrile	10	9.977	100	70 130
1,1-Dichloroethene	10	11.54	115	70 130
Methylene Chloride	10	10.18	102	70 130
Carbon Disulfide	10	9.841	98	70 130
Trichlorotrifluoroethane	10	10.32	103	70 130
Trans-1,2-Dichloroethene	10	10.20	102	70 130
1,1-Dichloroethane	10	10.37	104	70 130
Methyl tert-butyl ether(MTBE)	10	10.11	101	70 130
Methyl Ethyl Ketone	10	10.49	105	70 130
Cis-1,2-Dichloroethene	10	7.650	77	70 130
Hexane	10	10.50	105	70 130
Chloroform	10	10.27	103	70 130
Ethyl acetate	10	11.44	114	70 130
Tetrahydrofuran	10	10.24	102	70 130
1,2-Dichloroethane	10	11.38	114	70 130
1,1,1-Trichloroethane	10	10.73	107	70 130
Benzene	10	9.470	95	70 130
Carbon Tetrachloride	10	11.34	113	70 130
Cyclohexane	10	11.24	112	70 130
1,2-dichloropropane	10	9.663	97	70 130
Bromodichloromethane	10	10.43	104	70 130
Trichloroethene	10	10.45	105	70 130
1,4-Dioxane	10	7.825	78	70 130
Heptane	10	10.64	106	70 130
cis-1,3-Dichloropropene	10	9.857	99	70 130
4-Methyl-2-pentanone(MIBK)	10	9.743	97	70 130
trans-1,3-Dichloropropene	10	9.316	93	70 130
1,1,2-Trichloroethane	10	9.652	97	70 130
Toluene	10	9.947	99	70 130
Dibromochloromethane	10	10.37	104	70 130
2-Hexanone(MBK)	10	9.546	95	70 130
1,2-Dibromoethane(EDB)	10	9.617	96	70 130

FORM III AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No: SAS No: SDG No GCJ63027

LCS - Client Id: CJ61772 LCS

FORM III AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No:  SAS No:  SDG No GCJ63027

LCS - Client Id: CJ63030 LCS

COMPOUND	SPIKE ADDED (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Propylene	10	12.04	120	70 130
Dichlorodifluoromethane	10	11.73	117	70 130
Chloromethane	10	12.44	124	70 130
1,2-Dichlorotetrafluoroethane	10	11.35	114	70 130
Vinyl Chloride	10	11.15	112	70 130
1,3-Butadiene	10	10.87	109	70 130
Bromomethane	10	9.579	96	70 130
Chloroethane	10	9.761	98	70 130
Ethanol	5	5.449	109	70 130
Acetone	10	11.38	114	70 130
Trichlorofluoromethane	10	11.48	115	70 130
Isopropylalcohol	7	6.442	92	70 130
Acrylonitrile	10	9.965	100	70 130
1,1-Dichloroethene	10	11.46	115	70 130
Methylene Chloride	10	10.15	102	70 130
Carbon Disulfide	10	9.580	96	70 130
Trichlorotrifluoroethane	10	10.19	102	70 130
Trans-1,2-Dichloroethene	10	10.19	102	70 130
1,1-Dichloroethane	10	10.20	102	70 130
Methyl tert-butyl ether(MTBE)	10	10.04	100	70 130
Methyl Ethyl Ketone	10	10.50	105	70 130
Cis-1,2-Dichloroethene	10	7.185	72	70 130
Hexane	10	10.38	104	70 130
Chloroform	10	10.14	101	70 130
Ethyl acetate	10	11.10	111	70 130
Tetrahydrofuran	10	10.32	103	70 130
1,2-Dichloroethane	10	11.50	115	70 130
1,1,1-Trichloroethane	10	10.86	109	70 130
Benzene	10	9.311	93	70 130
Carbon Tetrachloride	10	11.33	113	70 130
Cyclohexane	10	11.22	112	70 130
1,2-dichloropropane	10	9.448	94	70 130
Bromodichloromethane	10	10.19	102	70 130
Trichloroethene	10	10.06	101	70 130
1,4-Dioxane	10	7.917	79	70 130
Heptane	10	10.65	107	70 130
cis-1,3-Dichloropropene	10	9.803	98	70 130
4-Methyl-2-pentanone(MIBK)	10	9.634	96	70 130
trans-1,3-Dichloropropene	10	9.442	94	70 130
1,1,2-Trichloroethane	10	9.539	95	70 130
Toluene	10	9.775	98	70 130
Dibromochloromethane	10	10.23	102	70 130
2-Hexanone(MBK)	10	9.643	96	70 130
1,2-Dibromoethane(EDB)	10	9.497	95	70 130

FORM III AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No: SAS No: SDG No GCJ63027

LCS - Client Id: CJ63030 LCS

FORM III AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No:  SAS No:  SDG No GCJ63027

LCS - Client Id: CJ63844 LCS

COMPOUND	SPIKE ADDED (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Propylene	10	10.54	105	70 130
Dichlorodifluoromethane	10	12.01	120	70 130
Chloromethane	10	11.53	115	70 130
1,2-Dichlorotetrafluoroethane	10	11.52	115	70 130
Vinyl Chloride	10	11.06	111	70 130
1,3-Butadiene	10	10.39	104	70 130
Bromomethane	10	10.47	105	70 130
Chloroethane	10	9.816	98	70 130
Ethanol	5	5.023	100	70 130
Acetone	10	10.74	107	70 130
Trichlorodifluoromethane	10	11.60	116	70 130
Isopropylalcohol	7	8.452	121	70 130
Acrylonitrile	10	9.966	100	70 130
1,1-Dichloroethene	10	10.92	109	70 130
Methylene Chloride	10	8.913	89	70 130
Carbon Disulfide	10	10.19	102	70 130
Trichlorotrifluoroethane	10	10.94	109	70 130
Trans-1,2-Dichloroethene	10	10.27	103	70 130
1,1-Dichloroethane	10	10.60	106	70 130
Methyl tert-butyl ether(MTBE)	10	9.936	99	70 130
Methyl Ethyl Ketone	10	10.85	109 C	70 130
Cis-1,2-Dichloroethene	10	10.76	108	70 130
Hexane	10	9.363	94	70 130
Chloroform	10	10.39	104	70 130
Ethyl acetate	10	11.97	120	70 130
Tetrahydrofuran	10	9.667	97	70 130
1,2-Dichloroethane	10	11.27	113	70 130
1,1,1-Trichloroethane	10	10.74	107	70 130
Benzene	10	9.793	98	70 130
Carbon Tetrachloride	10	11.34	113 O	70 130
Cyclohexane	10	10.10	101	70 130
1,2-dichloropropane	10	10.24	102	70 130
Bromodichloromethane	10	10.97	110	70 130
Trichloroethene	10	10.70	107	70 130
1,4-Dioxane	10	9.109	91	70 130
Heptane	10	10.12	101	70 130
cis-1,3-Dichloropropene	10	10.51	105	70 130
4-Methyl-2-pentanone(MIBK)	10	10.49	105	70 130
trans-1,3-Dichloropropene	10	9.954	100	70 130
1,1,2-Trichloroethane	10	10.02	100	70 130
Toluene	10	10.31	103	70 130
Dibromochloromethane	10	11.40	114	70 130
2-Hexanone(MBK)	10	10.10	101	70 130
1,2-Dibromoethane(EDB)	10	10.71	107	70 130

FORM III AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No: SAS No: SDG No GCJ63027

LCS - Client Id: CJ63844 LCS

FORM III AIR

4A  
AIR METHOD BLANK SUMMARY

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Client ID

CJ61772 BLANK

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63027

Lab File ID: 1021\_07.D

Lab Sample ID:

CJ61772 BLK

Date Analyzed: 10/21/2021

Time Analyzed:

16:07

GC Column: RTX-1 60M

Lab Batch ID:

597419

Instrument ID: CHEM20

Heated Purge:(Y/N)

Y

THIS METHOD BLANK APPLIES TO THE FOLLOWING QC AND FIELD SAMPLES:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01 CJ61772 LCS	CJ61772 LCS	1021_03.D	13:39
02 CJ61772 QC	CJ61772	1021_05.D	14:53
03 61772 dup	CJ61772 DUP	1021_06.D	15:33
04 IA-3	CJ63027	1021_21.D	01:16
05 SV-4 5X	CJ63028 5X	1021_22.D	01:53
06 SV-5 5X	CJ63029 5X	1021_23.D	02:29
07 SV-6 5X	CJ63031 5X	1021_25.D	03:42
08			
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COMMENTS: \_\_\_\_\_

FORM IV AIR

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CJ61772 BLANK
SDG No.:	GCJ63027	Lab Sample ID:	CJ61772 BL	
Canister:	BL	Lab File ID:	1021_07.D	
Instrument:	CHEM20	Column:	RTX-1 60M	Date Received: 10/20/21
Purge Volume	200 (cc)			Date Analyzed: 10/21/21
Matrix:	AIR		Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.580	U	0.580	0.580	r
75-71-8	Dichlorodifluoromethane	0.200	U	0.200	0.200	r
74-87-3	Chloromethane	0.480	U	0.480	0.480	r
106-99-0	1,3-Butadiene	0.450	U	0.450	0.450	r
75-00-3	Chloroethane	0.380	U	0.380	0.380	r
64-17-5	Ethanol	0.530	U	0.530	0.530	r
67-64-1	Acetone	0.420	U	0.420	0.420	r
67-63-0	Isopropylalcohol	0.410	U	0.410	0.410	r
107-13-1	Acrylonitrile	0.460	U	0.460	0.460	r
75-09-2	Methylene Chloride	0.860	U	0.860	0.860	r
75-15-0	Carbon Disulfide	0.320	U	0.320	0.320	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.280	U	0.280	0.280	r
78-93-3	Methyl Ethyl Ketone	0.340	U	0.340	0.340	r
110-54-3	Hexane	0.280	U	0.280	0.280	r
141-78-6	Ethyl acetate	0.280	U	0.280	0.280	r
109-99-9	Tetrahydrofuran	0.340	U	0.340	0.340	r
110-82-7	Cyclohexane	0.290	U	0.290	0.290	r
142-82-5	Heptane	0.240	U	0.240	0.240	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.240	U	0.240	0.240	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.270	U	0.270	0.270	r
591-78-6	2-Hexanone(MBK)	0.240	U	0.240	0.240	r
630-20-6	1,1,1,2-Tetrachloroethane	0.150	U	0.150	0.150	r
108-90-7	Chlorobenzene	0.220	U	0.220	0.220	r
100-41-4	Ethylbenzene	0.230	U	0.230	0.230	r
100-42-5	Styrene	0.230	U	0.230	0.230	r
95-47-6	o-Xylene	0.230	U	0.230	0.230	r
98-82-8	Isopropylbenzene	0.200	U	0.200	0.200	r
622-96-8	4-Ethyltoluene	0.200	U	0.200	0.200	r
108-67-8	1,3,5-Trimethylbenzene	0.200	U	0.200	0.200	r
95-63-6	1,2,4-Trimethylbenzene	0.200	U	0.200	0.200	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.140	U	0.140	0.140	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.260	U	0.260	0.260	r
75-69-4	Trichlorofluoromethane(sim)	0.180	U	0.180	0.180	r
107-06-2	1,2-Dichloroethane(sim)	0.250	U	0.250	0.250	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CJ61772 BLANK
SDG No.:	GCJ63027	Lab Sample ID:	CJ61772 BL	
Canister:	BL	Lab File ID:	1021_07.D	
Instrument:	CHEM20	Column:	RTX-1 60M	Date Received: 10/20/21
Purge Volume	200	(cc)	Date Analyzed: 10/21/21	
Matrix:	AIR	Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

4A  
AIR METHOD BLANK SUMMARY

Lab Name:	<u>Phoenix Environmental Labs</u>	Client:	<u>CJ63030 BLANK</u>
Lab Code:	<u>Phoenix</u>	Case No.:	<u>SDG No.: GCJ63027</u>
Lab File ID:	<u>1022_06.D</u>	Lab Sample ID:	<u>CJ63030 BLK</u>
Date Analyzed:	<u>10/22/2021</u>	Time Analyzed:	<u>13:20</u>
GC Column:	<u>RTX-1 60M</u>	Lab Batch ID:	<u>597799</u>
Instrument ID:	<u>CHEM20</u>	Heated Purge:(Y/N)	<u>Y</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING QC AND FIELD SAMPLES:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01 CJ63030 LCS	CJ63030 LCS	1022_04.D	12:13
02 IA-2	CJ63030	1022_07.D	14:28
03 IA-2 DUP	CJ63030 DUP	1022_08.D	15:10
04 SV-4 15X	CJ63028 15X	1022_11.D	17:00
05 SV-5 160X	CJ63029 160X	1022_12.D	17:36
06 SV-5 800X	CJ63029 800X	1022_13.D	18:11
07 SV-6 15X	CJ63031 15X	1022_14.D	18:47
08			
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20			

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_

FORM IV AIR

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

CJ63030 BLANK

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63030 BL
Canister:	BL	Lab File ID:	1022_06.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200 (cc)	Date Analyzed:	10/22/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.580	U	0.580	0.580	r
75-71-8	Dichlorodifluoromethane	0.200	U	0.200	0.200	r
74-87-3	Chloromethane	0.480	U	0.480	0.480	r
106-99-0	1,3-Butadiene	0.450	U	0.450	0.450	r
75-00-3	Chloroethane	0.380	U	0.380	0.380	r
64-17-5	Ethanol	0.530	U	0.530	0.530	r
67-64-1	Acetone	0.420	U	0.420	0.420	r
67-63-0	Isopropylalcohol	0.410	U	0.410	0.410	r
107-13-1	Acrylonitrile	0.460	U	0.460	0.460	r
75-09-2	Methylene Chloride	0.860	U	0.860	0.860	r
75-15-0	Carbon Disulfide	0.320	U	0.320	0.320	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.280	U	0.280	0.280	r
78-93-3	Methyl Ethyl Ketone	0.340	U	0.340	0.340	r
110-54-3	Hexane	0.280	U	0.280	0.280	r
141-78-6	Ethyl acetate	0.280	U	0.280	0.280	r
109-99-9	Tetrahydrofuran	0.340	U	0.340	0.340	r
110-82-7	Cyclohexane	0.290	U	0.290	0.290	r
142-82-5	Heptane	0.240	U	0.240	0.240	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.240	U	0.240	0.240	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.270	U	0.270	0.270	r
591-78-6	2-Hexanone(MBK)	0.240	U	0.240	0.240	r
630-20-6	1,1,1,2-Tetrachloroethane	0.150	U	0.150	0.150	r
108-90-7	Chlorobenzene	0.220	U	0.220	0.220	r
100-41-4	Ethylbenzene	0.230	U	0.230	0.230	r
100-42-5	Styrene	0.230	U	0.230	0.230	r
95-47-6	o-Xylene	0.230	U	0.230	0.230	r
98-82-8	Isopropylbenzene	0.200	U	0.200	0.200	r
622-96-8	4-Ethyltoluene	0.200	U	0.200	0.200	r
108-67-8	1,3,5-Trimethylbenzene	0.200	U	0.200	0.200	r
95-63-6	1,2,4-Trimethylbenzene	0.200	U	0.200	0.200	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.140	U	0.140	0.140	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.260	U	0.260	0.260	r
75-69-4	Trichlorofluoromethane(sim)	0.180	U	0.180	0.180	r
107-06-2	1,2-Dichloroethane(sim)	0.250	U	0.250	0.250	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

**CLIENT ID**

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CJ63030 BLANK
SDG No.:	GCJ63027	Lab Sample ID:	CJ63030 BL	
Canister:	BL	Lab File ID:	1022_06.D	
Instrument:	CHEM20	Column:	RTX-1 60M	Date Received: 10/21/21
Purge Volume	200	(cc)	Date Analyzed: 10/22/21	
Matrix:	AIR	Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

4A  
AIR METHOD BLANK SUMMARY

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Client ID

CJ63844 BLANK

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63027

Lab File ID: 1025\_06.D

Lab Sample ID:

CJ63844 BLK

Date Analyzed: 10/25/2021

Time Analyzed:

12:59

GC Column: RTX-VMS

Lab Batch ID:

597895

Instrument ID: CHEM24

Heated Purge:(Y/N)

Y

THIS METHOD BLANK APPLIES TO THE FOLLOWING QC AND FIELD SAMPLES:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01 CJ63844 LCS	CJ63844 LCS	1025_04.D	11:57
02 SV-4 30X	CJ63028 30X	1025_07.D	13:31
03 CJ63844 QC	CJ63844	1025_10.D	15:20
04 63844 dup	CJ63844 DUP	1025_11.D	15:56
05			
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COMMENTS: \_\_\_\_\_

FORM IV AIR

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CJ63844 BLANK
SDG No.:	GCJ63027	Lab Sample ID:	CJ63844 BL	
Canister:	BL	Lab File ID:	1025_06.D	
Instrument:	CHEM24	Column:	RTX-VMS	Date Received: 10/22/21
Purge Volume	200	(cc)		Date Analyzed: 10/25/21
Matrix:	AIR		Dilution Factor: 1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.202	U	0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.421	U	0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.863	U	0.863	0.863	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-42-5	Styrene	0.235	U	0.235	0.235	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.204	U	0.204	0.204	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r
71-55-6	1,1,1-Trichloroethane(sim)	0.500	U	0.500	0.500	r
71-43-2	Benzene(sim)	0.313	U	0.313	0.313	r
56-23-5	Carbon Tetrachloride(sim)	0.032	U	0.032	0.032	r
75-35-4	1,1-Dichloroethene(sim)	0.051	U	0.051	0.051	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Client:	<u>GZA-NY</u>	Lab:	<u>Phoenix Env. Labs</u>	<u>CJ63844 BLANK</u>
SDG No.:	<u>GCJ63027</u>	Lab Sample ID:	<u>CJ63844 BL</u>	
Canister:	<u>BL</u>	Lab File ID:	<u>1025_06.D</u>	
Instrument:	<u>CHEM24</u>	Column:	<u>RTX-VMS</u>	Date Received: <u>10/22/21</u>
Purge Volume	<u>200</u>	(cc)	Date Analyzed:	<u>10/25/21</u>
Matrix:	AIR	Dilution Factor:		1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

5B  
AIR INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63027

Lab File ID: 1012\_05.D

BFB Injection Date: 10/12/21

Instrument ID: CHEM20

BFB Injection Time: 18:46

GC Column: RTX-1 60M

Heated Purge: (Y/N)

Y

AutoFind: Scans 780, 781, 782; Background Corrected with Scan 775

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.7
75	30.0 - 66.0% of mass 95	44.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 ( 0.0 )1
174	50.0 - 120.0% of mass 95	87.7
175	4.0 - 9.0% of mass 174	7.5 ( 6.6 )1
176	93.0 - 101.0% of mass 174	97.4 ( 85.4 )1
177	5.0 - 9.0% of mass 176	6.7 ( 5.7 )1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01	ICAL 0.02	0.02	10/12/21	19:21	
02	ICAL 0.035	0.035 ppb	10/12/21	19:56	
03	ICAL 0.05	0.05 ppb	10/12/21	20:31	
04	ICAL 0.1	0.10 ppb	10/12/21	21:07	
05	ICAL 0.2	0.20 ppb	10/12/21	21:43	
06	ICAL 0.5	0.50 ppb	10/13/21	00:55	
07	ICAL 2.5	2.5 ppb	10/13/21	01:33	
08	ICAL 5	5 ppb	10/13/21	02:08	
09	ICAL 25	25 ppb	10/13/21	02:46	
10	ICAL 40	40 ppb	10/13/21	03:25	
11	ICAL 1	1ppb cc	10/13/21	04:34	
12	ICAL 10	10ppb	10/13/21	05:11	
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

(\*) Outside 24 hr clock

FORM V AIR

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Lab Code: Phoenix

Instrument ID: CHEM20

Heated Purge (Y/N): Y

GC Column:

Client: \_\_\_\_\_

SDG No.: GCJ63027

Calibration Date From: 10/12/21 21:43

Calibration Date Thru: 10/13/21 05:11

Method File: 20\_AIR\_1012.M

Laboratory File Ids

	RRF1 1012_06.D	RRF2 1012_07.D	RRF3 1012_08.D	RRF4 1012_09.D	RRF5 1012_10.D	RRF6 1012_11.D								
COMPOUND	RRF1 0.02	RRF2 0.035	RRF3 0.05	RRF4 0.1	RRF5 0.2	RRF6 0.5	RRF7 1	RRF8 2.5	RRF9 5	RRF10 10	RRF11 25	RRF12 40	<u>RRF</u>	% RSD
Propylene					1.332	1.081	1.211	1.101	1.282	1.191	1.139	1.131	1.183	7.46
Dichlorodifluoromethane					2.540	2.285	2.392	2.295	2.610	2.500	2.354	2.312	2.411	5.12
Chloromethane					1.351	1.171	1.268	1.218	1.351	1.299	1.227	1.187	1.259	5.55
1,2-Dichlorotetrafluoroethane					2.395	2.090	2.319	2.207	2.436	2.346	2.221	2.193	2.276	5.15
Vinyl Chloride					1.014	0.937	1.018	0.973	1.092	1.024	0.974	0.985	1.002	4.63
1,3-Butadiene					1.187	1.020	0.985	0.907	1.045	1.001	0.960	0.952	1.007	8.36
Bromomethane					1.133	0.896	0.850	0.802	0.893	0.844	0.821	0.806	0.881	12.25
Chloroethane					0.618	0.446	0.472	0.416	0.435	0.424	0.411	0.415	0.455	15.16
Ethanol						0.628	0.558	0.522	0.586	0.548	0.501	0.473	0.545	9.58
Acetone					2.337	2.299	2.293	2.098	2.328	2.222	2.141	2.114	2.229	4.45
Trichlorofluoromethane					2.567	2.447	2.647	2.526	2.846	2.675	2.581	2.557	2.606	4.60
Isopropylalcohol					3.200	2.807	3.331	3.002	3.191	3.024	2.788	2.481	2.978	9.28
Acrylonitrile					0.977	1.101	1.191	0.977	1.113	1.024	1.016	1.030	1.054	7.11
1,1-Dichloroethene					1.905	1.770	1.944	1.866	2.060	2.189	2.101	2.107	1.993	7.18
Methylene Chloride					2.614	2.070	1.940	1.738	1.940	1.796	1.723	1.722	1.943	15.41
Carbon Disulfide					2.578	2.577	2.709	2.640	2.931	2.738	2.692	2.704	2.696	4.17
Trichlorotrifluoroethane					2.196	2.008	2.157	2.081	2.319	2.159	2.093	2.110	2.140	4.31
Trans-1,2-Dichloroethene					1.822	1.626	1.765	1.693	1.912	1.807	1.773	1.778	1.772	4.80
1,1-Dichloroethane					1.947	1.915	2.012	1.935	2.111	2.003	1.956	1.944	1.978	3.20
Methyl tert-butyl ether(MTBE)					2.851	2.351	2.706	2.427	2.681	2.559	2.459	2.458	2.561	6.64
Methyl Ethyl Ketone					3.637	2.995	3.003	2.935	3.349	3.164	3.135	3.391	3.201	7.52
Cis-1,2-Dichloroethene						1.367	1.379	1.414	1.314	1.314	1.464	1.511	1.395	5.30
Hexane					2.062	1.952	2.050	1.965	2.197	2.074	2.023	2.006	2.041	3.77
Chloroform					2.311	2.095	2.087	2.026	2.295	2.167	2.119	2.118	2.152	4.70
Ethyl acetate					0.406	0.382	0.462	0.430	0.451	0.437	0.417	0.419	0.425	5.96

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, q2i, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ63027

Instrument ID: CHEM20

Calibration Date From: 10/12/21 21:43

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 05:11

GC Column: \_\_\_\_\_

Method File: 20\_AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_06.D</u>	<u>RRF2</u>	<u>1012_07.D</u>	<u>RRF3</u>	<u>1012_08.D</u>	<u>RRF4</u>	<u>1012_09.D</u>	<u>RRF5</u>	<u>1012_10.D</u>	<u>RRF6</u>	<u>1012_11.D</u>				
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD <30%		
Tetrahydrofuran						1.997	1.706	1.801	1.719	1.976	1.862	1.817	1.803	1.835	5.81	
1,2-Dichloroethane						1.499	1.426	1.487	1.429	1.645	1.556	1.531	1.534	1.513	4.71	
1,1,1-Trichloroethane						2.456	2.129	2.262	2.147	2.428	2.302	2.240	2.241	2.276	5.19	
Benzene						2.921	3.103	2.845	2.804	3.423	2.978	3.215	2.919	3.026	6.91	
Carbon Tetrachloride						2.345	1.950	2.296	2.226	2.569	2.501	2.476	2.492	2.357	8.56	
Cyclohexane							1.373	1.475	1.339	1.536	1.437	1.398	1.381	1.420	4.77	
1,2-dichloropropane	○					0.374	0.359	0.370	0.353	0.400	0.371	0.359	0.358	0.368	4.03 ○	
Bromodichloromethane						0.593	0.548	0.551	0.544	0.614	0.601	0.581	0.576	0.576	4.52	
Trichloroethylene						0.373	0.355	0.389	0.375	0.421	0.404	0.383	0.368	0.383	5.49	
1,4-Dioxane						0.151	0.148	0.175	0.162	0.183	0.173	0.159	0.151	0.163	7.93	
Heptane						0.895	0.850	0.847	0.826	0.858	0.806	0.769	0.764	0.827	5.46	
cis-1,3-Dichloropropene						0.453	0.386	0.427	0.385	0.455	0.440	0.429	0.433	0.426	6.35	
4-Methyl-2-pentanone(MIBK)						1.325	1.062	1.105	1.065	1.175	1.091	1.009	1.017	1.106	9.28	
trans-1,3-Dichloropropene						0.419	0.349	0.384	0.339	0.400	0.392	0.379	0.389	0.381	6.89	
1,1,2-Trichloroethane						0.352	0.327	0.318	0.309	0.351	0.341	0.323	0.327	0.331	4.74	
Toluene						0.931	0.914	0.957	0.902	1.015	0.977	0.939	0.921	0.945	3.95	
Dibromochloromethane						0.610	0.546	0.607	0.561	0.660	0.651	0.640	0.644	0.615	6.88	
2-Hexanone(MBK)						0.690	0.826	0.894	0.874	1.006	0.960	0.930	0.926	0.888	10.89	
1,2-Dibromoethane(EDB)						0.463	0.447	0.501	0.460	0.543	0.514	0.508	0.511	0.493	6.72	
Tetrachloroethylene						0.482	0.457	0.490	0.468	0.532	0.518	0.492	0.484	0.490	5.03	
1,1,1,2-Tetrachloroethane	○					1.083	1.012	1.017	0.970	1.038	1.010	0.856	0.806	0.974	9.71 ○	
Chlorobenzene						1.566	1.558	1.675	1.533	1.690	1.594	1.381	1.314	1.539	8.55	
Ethylbenzene						2.905	2.673	2.715	2.722	2.615	2.823	2.654	2.301	2.169	2.620	9.07
m,p-Xylene						2.143	2.039	2.061	1.687	2.067	2.196	2.085	1.781	1.677	1.971	10.12
Bromoform						1.298	1.180	1.314	1.119	1.255	1.188	1.064	1.039	1.182	8.75	

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, q, qi, qfi, q2i, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ63027

Instrument ID: CHEM20

Calibration Date From: 10/12/21 21:43

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 05:11

GC Column: \_\_\_\_\_

Method File: 20\_AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_06.D</u>	<u>RRF2</u>	<u>1012_07.D</u>	<u>RRF3</u>	<u>1012_08.D</u>	<u>RRF4</u>	<u>1012_09.D</u>	<u>RRF5</u>	<u>1012_10.D</u>	<u>RRF6</u>	<u>1012_11.D</u>			
COMPOUND		RRF1 0.02	RRF2 0.035	RRF3 0.05	RRF4 0.1	RRF5 0.2	RRF6 0.5	RRF7 1	RRF8 2.5	RRF9 5	RRF10 10	RRF11 25	RRF12 40	% RSD	
Styrene						1.402	1.415	1.514	1.449	1.574	1.500	1.316	1.243	1.427	7.59
1,1,2,2-Tetrachloroethane						1.624	1.551	1.595	1.500	1.595	1.523	1.285	1.193	1.483	10.65
o-Xylene					2.361	2.251	2.136	2.243	2.124	2.252	2.140	1.800	1.682	2.110	10.61
Isopropylbenzene						3.129	2.916	3.018	2.957	3.101	2.990	2.553	2.354	2.877	9.59
4-Ethyltoluene						2.862	2.868	3.106	2.893	3.189	3.074	2.600	2.411	2.875	9.13
1,3,5-Trimethylbenzene						2.748	2.620	2.690	2.610	2.687	2.580	2.238	2.074	2.531	9.54
1,2,4-Trimethylbenzene						2.700	2.675	2.758	2.592	2.738	2.624	2.235	2.027	2.544	10.47
Benzyl chloride						5.487	5.359	5.662	5.488	5.876	5.586	4.628	4.186	5.284	10.87
1,3-Dichlorobenzene						1.206	1.253	1.499	1.372	1.563	1.547	1.289	1.203	1.367	11.07
1,4-Dichlorobenzene						0.990	1.062	1.241	1.216	1.373	1.402	1.182	1.114	1.197	11.97
sec-Butylbenzene						3.959	3.843	3.954	3.716	3.936	3.765	3.217	2.904	3.662	10.66
4-Isopropyltoluene						3.849	3.689	3.674	3.609	3.833	3.708	3.205	2.874	3.555	9.56
1,2-Dichlorobenzene						1.332	1.298	1.596	1.416	1.542	1.559	1.300	1.179	1.403	10.70
n-Butylbenzene						2.577	2.690	2.973	2.824	3.047	2.963	2.651	2.446	2.771	7.73
1,2,4-Trichlorobenzene	○	qfi				0.126	0.347	1.217	2.130	4.718	10.390	25.590	39.640	Coef R2	1.00
Hexachlorobutadiene						1.503	1.446	1.480	1.378	1.320	1.294	1.122	1.064	1.326	12.20
1,2-Dichlorotetrafluoroethane(sim)		2.806	2.563	2.690	2.243	2.087	1.886	2.081	1.975	2.168				2.278	14.43
Vinyl Chloride(sim)		1.381	1.235	1.135	1.024	0.991	0.910	0.997	0.953	1.042				1.074	14.03
Bromomethane(sim)	○	1.117	1.060	1.010	0.904	1.017	0.734	0.764	0.722	0.796				0.903	16.92
Trichlorofluoromethane(sim)		3.405	2.916	2.744	2.616	2.507	2.393	2.552	2.452	2.723				2.701	11.47
1,2-Dichloroethane(sim)		1.902	1.637	1.642	1.356	1.346	1.287	1.337	1.286	1.467				1.473	14.35
1,1,1-Trichloroethane(sim)		2.985	2.729	2.349	2.278	2.141	2.035	2.161	2.103	2.360				2.349	13.39
Benzene(sim)			3.259	3.038	3.154	2.623	2.801	2.558						2.905	9.92
Carbon Tetrachloride(sim)		2.586	2.371	2.329	2.125	2.061	1.908	2.215	2.153					2.218	9.40
1,1-Dichloroethene(sim)		2.256	2.079	2.018	1.862	1.710	1.598	1.748	1.679	1.836				1.865	11.48

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, q, qi, qfi, q2, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ63027

Instrument ID: CHEM20

Calibration Date From: 10/12/21 21:43

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 05:11

GC Column: \_\_\_\_\_

Method File: 20\_AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_06.D</u>	<u>RRF2</u>	<u>1012_07.D</u>	<u>RRF3</u>	<u>1012_08.D</u>	<u>RRF4</u>	<u>1012_09.D</u>	<u>RRF5</u>	<u>1012_10.D</u>	<u>RRF6</u>	<u>1012_11.D</u>		
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD
Trichlorotrifluoroethane(sim)		2.700	2.455	2.259	2.176	2.086	1.989	2.098	2.007	2.219				2.221 10.32
Trans-1,2-Dichloroethene(sim)		2.139	1.896	1.820	1.677	1.636	1.468	1.588	1.524	1.704				1.717 12.11
1,1-Dichloroethane(sim)		2.499	2.317	2.110	1.989	1.918	1.861	1.961	1.889	2.107				2.072 10.32
Cis-1,2-Dichloroethene(sim)		1.975	1.674	1.593	1.544	1.461	1.233	1.240	1.273	1.169				1.462 18.01
Chloroform(sim)		2.744	2.392	2.185	2.108	2.033	1.939	2.038	1.953	2.176				2.174 11.71
1,2-dichloropropane(sim)		0.548	0.472	0.433	0.417	0.389	0.374	0.396	0.384	0.436				0.428 12.76
Bromodichloromethane(sim)		0.724	0.665	0.642	0.665	0.594	0.548	0.552	0.545	0.614				0.617 10.15
Trichloroethene(sim)		0.570	0.511	0.473	0.447	0.433	0.410	0.435	0.416	0.471				0.463 11.05
1,4-Dioxane(sim)			0.177	0.123	0.181	0.155	0.148	0.175	0.162	0.183				0.163 12.48
cis-1,3-Dichloropropene(sim)		0.576	0.538	0.494	0.466	0.437	0.408	0.445	0.417					0.473 12.57
1,1,2-Trichloroethane(sim)		0.395	0.401	0.374	0.360	0.349	0.327	0.318	0.309	0.351				0.354 9.21
Dibromochloromethane(sim)		0.872	0.765	0.745	0.703	0.665	0.589	0.668	0.623					0.704 12.72
1,2-Dibromoethane(EDB)(sim)		0.703	0.574	0.564	0.522	0.460	0.447	0.501	0.460	0.543				0.530 15.02
Tetrachloroethene(sim)		0.745	0.662	0.627	0.597	0.572	0.545	0.579	0.553	0.626	0.607			0.611 9.70
Bromoform(sim)			1.842	1.658	1.547	1.494	1.402	1.333	1.498	1.304				1.510 11.72
m,p-Xylene(sim)			2.944	2.563	2.373	2.196	2.082	2.081	2.116	2.073	2.198			2.292 12.82
1,1,2,2-Tetrachloroethane(sim)			2.235	1.952	1.822	1.756	1.646	1.614	1.700	1.604	1.703			1.781 11.36
Benzyl chloride(sim)			1.483	1.332	1.371	1.257	1.187	1.297	1.581	1.435				1.368 9.35
1,3-Dichlorobenzene(sim)			1.733	1.569	1.468	1.376	1.357	1.383	1.689	1.581	1.802			1.551 10.69
1,4-Dichlorobenzene(sim)			1.513	1.415	1.180	1.208	0.990	1.062	1.241	1.216				1.228 13.89
sec-Butylbenzene(sim)			5.457	4.780	4.473	4.349	4.182	4.149	4.229	4.079	4.290			4.443 9.77
4-Isopropyltoluene(sim)			5.252	4.569	4.504	4.091	3.747	3.687	3.672	3.611	3.830			4.107 13.61
1,2-Dichlorobenzene(sim)			2.113	1.827	1.692	1.560	1.491	1.510	1.795	1.610	1.750			1.705 11.46
n-Butylbenzene(sim)				3.347	2.852	2.586	2.577	2.690	2.973	2.824				2.836 9.46
1,2,4-Trichlorobenzene(sim)	qfi	0.047	0.056	0.065	0.106	0.200	0.436	1.018					Coef R2	0.99

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, qi2, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

**Client:**

Lab Code: Phoenix

SDG No.: GCJ63027

Instrument ID: CHEM20

Calibration Date From: 10/12/21 21:43

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 05:11

GC Column:

Method File: 20 AIR 1012.M

## Laboratory File Ids

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (I, II, If1, II2, If12, q, qI, qf1, qI2, qf12) display concentrations and not response factors

**8A**  
**AIR INTERNAL STANDARD AREA AND RT SUMMARY**  
**Full Scan**

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027  
Lab Method / File Id: 20AIR\_1012.M / Average Date Analyzed: 10/13/21  
Instrument ID: CHEM20 Time Analyzed: 4:34  
GC Column: \_\_\_\_\_ ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS1 (DFM) = Difluoromethane

IS2 (DTB) = 1,4-Dinitrobenzene

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

**RT UPPER LIMIT = +0.33 minutes of internal standard RT**

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

- \* Values outside of QC limits.

FORM VIII VOA

8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Sim Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027  
Lab Method / File Id: 20AIR\_1012.M / Average Date Analyzed: 10/13/21  
Instrument ID: CHEM20 Time Analyzed: 4:34  
GC Column: \_\_\_\_\_ ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## FORM VIII VOA

# Injection Log

Data Directory: H:\AIR2021\CHEM20\100CT\12\

Line	V1	FileName	SampleName	MscInfo	Injection Time
1)	0	1012_25.D	xxxxxxxxxxxx		N/A
2)	4	1012_01.D	xxxxxxxxxxxx		10/12/21 14:11
3)	5	1012_02.D	xxxxxxxxxxxx		10/12/21 17:04
4)	6	1012_03.D	xxxxxxxxxxxx		10/12/21 17:38
5)	7	1012_04.D	xxxxxxxxxxxx		10/12/21 18:12
6)	8	1012_05.D	BFB TUNE	0/0	10/12/21 18:46
7)	4	1012_06.D	ICAL 0.02	0.02	10/12/21 19:21
8)	3	1012_07.D	ICAL 0.035	0.035 ppb	10/12/21 19:56
9)	4	1012_08.D	ICAL 0.05	0.05 ppb	10/12/21 20:31
10)	5	1012_09.D	ICAL 0.1	0.10 ppb	10/12/21 21:07
11)	6	1012_10.D	ICAL 0.2	0.20 ppb	10/12/21 21:43
12)	7	1012_11.D	ICAL 0.5	0.50 ppb	10/13/21 0:55
13)	8	1012_12.D	ICAL 2.5	2.5 ppb	10/13/21 1:33
14)	9	1012_13.D	ICAL 5	5 ppb	10/13/21 2:08
15)	10	1012_14.D	ICAL 25	25 ppb	10/13/21 2:46
16)	11	1012_15.D	ICAL 40	40 ppb	10/13/21 3:25
17)	12	1012_16.D	xxxxxxxxxxxx		10/13/21 3:59
18)	13	1012_17.D	ICAL 1	1ppb cc	10/13/21 4:34
19)	14	1012_18.D	ICAL 10	10ppb	10/13/21 5:11
20)	15	1012_19.D	xxxxxxxxxxxx		10/13/21 5:48
21)	16	1012_20.D	xxxxxxxxxxxx		10/13/21 6:22
22)	17	1012_21.D	xxxxxxxxxxxx		10/13/21 6:56
23)	18	1012_22.D	xxxxxxxxxxxx		10/13/21 7:35
24)	19	1012_23.D	xxxxxxxxxxxx		10/13/21 8:16
25)	20	1012_24.D	xxxxxxxxxxxx		10/13/21 8:54
26)	22	1012_26.D	xxxxxxxxxxxx		10/13/21 9:35
27)	23	1012_27.D	xxxxxxxxxxxx		10/13/21 10:18
28)	24	1012_28.D	xxxxxxxxxxxx		10/13/21 12:11
29)	25	1012_29.D	xxxxxxxxxxxx		10/13/21 12:47
30)	26	1012_30.D	xxxxxxxxxxxx		10/13/21 13:23
31)	27	1012_31.D	xxxxxxxxxxxx		10/13/21 13:58
32)	28	1012_32.D	xxxxxxxxxxxx		10/13/21 14:55
33)	29	1012_33.D	xxxxxxxxxxxx		10/13/21 15:32
34)	30	1012_34.D	xxxxxxxxxxxx		10/13/21 16:08
35)	31	1012_35.D	xxxxxxxxxxxx		10/13/21 16:44
36)	32	1012_36.D	xxxxxxxxxxxx		10/13/21 17:25
37)	33	1012_37.D	xxxxxxxxxxxx		10/13/21 18:04
38)	34	1012_38.D	xxxxxxxxxxxx		10/13/21 18:44
39)	35	1012_39.D	xxxxxxxxxxxx		10/13/21 19:23
40)	36	1012_40.D	xxxxxxxxxxxx		10/13/21 20:53
41)	37	1012_41.D	xxxxxxxxxxxx		10/13/21 21:30
42)	38	1012_42.D	xxxxxxxxxxxx		10/13/21 22:06
43)	39	1012_43.D	xxxxxxxxxxxx		10/13/21 22:43
44)	40	1012_44.D	xxxxxxxxxxxx		10/13/21 23:19
45)	41	1012_45.D	xxxxxxxxxxxx		10/13/21 23:56
46)	42	1012_46.D	xxxxxxxxxxxx		10/14/21 0:32
47)	43	1012_47.D	xxxxxxxxxxxx		10/14/21 1:09
48)	44	1012_48.D	xxxxxxxxxxxx		10/14/21 1:49
49)	45	1012_49.D	xxxxxxxxxxxx		10/14/21 2:28
50)	46	1012_50.D	xxxxxxxxxxxx		10/14/21 3:01
51)	47	1014_01.D	xxxxxxxxxxxx		10/14/21 3:37
52)	48	1014_02.D	xxxxxxxxxxxx		10/14/21 4:13
53)	49	1014_03.D	xxxxxxxxxxxx		10/14/21 4:51
54)	50	1014_04.D	xxxxxxxxxxxx		10/14/21 5:25
55)	51	1014_05.D	xxxxxxxxxxxx		10/14/21 5:59
56)	52	1014_06.D	xxxxxxxxxxxx		10/14/21 6:37
57)	53	1014_07.D	xxxxxxxxxxxx		10/14/21 7:16
58)	54	1014_08.D	xxxxxxxxxxxx		10/14/21 7:55
59)	55	1014_09.D	xxxxxxxxxxxx		10/14/21 8:34
60)	56	1014_10.D	xxxxxxxxxxxx		10/14/21 9:13
61)	57	1014_11.D	xxxxxxxxxxxx		10/14/21 10:06
62)	58	1014_12.D	xxxxxxxxxxxx		10/14/21 10:42
63)	59	1014_13.D	xxxxxxxxxxxx		10/14/21 11:26
64)	60	1014_14.D	xxxxxxxxxxxx		10/14/21 12:12
65)	61	1014_15.D	xxxxxxxxxxxx		10/14/21 13:28
66)	62	1014_16.D	xxxxxxxxxxxx		10/14/21 14:16

67)	63	1014_17.D	xxxxxxxxxxxx	10/14/21	15:00
68)	64	1014_18.D	xxxxxxxxxxxx	10/14/21	15:43
69)	65	1014_19.D	xxxxxxxxxxxx	10/14/21	16:26
70)	66	1014_20.D	xxxxxxxxxxxx	10/14/21	17:03
71)	67	1014_21.D	xxxxxxxxxxxx	10/14/21	17:40
72)	68	1014_22.D	xxxxxxxxxxxx	10/14/21	18:17
73)	69	1014_23.D	xxxxxxxxxxxx	10/14/21	18:54
74)	70	1014_24.D	xxxxxxxxxxxx	10/14/21	19:39
75)	71	1014_25.D	xxxxxxxxxxxx	10/14/21	20:24
76)	72	1014_26.D	xxxxxxxxxxxx	10/14/21	22:25
77)	73	1014_27.D	xxxxxxxxxxxx	10/14/21	23:01
78)	74	1014_28.D	xxxxxxxxxxxx	10/14/21	23:37

5B  
AIR INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63027

Lab File ID: 1012\_04.D

BFB Injection Date: 10/12/21

Instrument ID: CHEM24

BFB Injection Time: 18:34

GC Column: RTX-VMS

Heated Purge: (Y/N) Y

AutoFind: Scans 1626, 1627, 1628; Background Corrected with Scan 1614

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.7
75	30.0 - 66.0% of mass 95	47.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 ✓ / 0.0 )1
174	50.0 - 120.0% of mass 95	92.3 ✓ / )1
175	4.0 - 9.0% of mass 174	8.0 ( 7.4 )1
176	93.0 - 101.0% of mass 174	96.7 ( 89.3 )1
177	5.0 - 9.0% of mass 176	6.7 ( 6.0 )1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 ICAL 0.02	0.02 ppb	1012_05.D	10/12/21	19:05 ✓
02 ICAL 0.035	0.035 ppb	1012_06.D	10/12/21	19:37 ✓
03 ICAL 0.05	0.05 ppb	1012_07.D	10/12/21	20:09 ✓
04 ICAL 0.1	0.10 ppb	1012_08.D	10/12/21	20:41 ✓
05 ICAL 0.2	0.20 ppb	1012_09.D	10/12/21	21:15 ✓
06 ICAL 0.5	0.50 ppb	1012_10.D	10/12/21	21:51 ✓
07 ICAL 2.5	2.5 ppb	1012_11.D	10/12/21	22:28 ✓
08 ICAL 5	5.0 ppb	1012_12.D	10/12/21	23:00 ✓
09 ICAL 25	25 ppb	1012_13.D	10/12/21	23:36 ✓
10 ICAL 40	40 ppb	1012_14.D	10/13/21	00:29 ✓
11 ICAL 1	1ppb ;	1012_16.D	10/13/21	01:34 ✓
12 ICAL 10	10ppb ;	1012_17.D	10/13/21	02:07 ✓
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

(\*) Outside 24 hr clock

FORM V AIR

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs  
 Lab Code: Phoenix  
 Instrument ID: CHEM24  
 Heated Purge (Y/N): Y  
 GC Column:

Client: \_\_\_\_\_  
 SDG No.: GCJ63027  
 Calibration Date From: 10/12/21 21:15 ✓  
 Calibration Date Thru: 10/13/21 02:07 ✓  
 Method File: 24AIR\_1012.M

Laboratory File Ids

	RRF1 1012_05.D	RRF2 1012_06.D	RRF3 1012_07.D	RRF4 1012_08.D	RRF5 1012_09.D	RRF6 1012_10.D							
COMPOUND	RRF1 0.02	RRF2 0.035	RRF3 0.05	RRF4 0.1	RRF5 0.2	RRF6 0.5	RRF7 1	RRF8 2.5	RRF9 5	RRF10 10	RRF11 25	RRF12 40	% RSD
Propylene				1.023	0.883	0.815	0.784	0.813	0.796	0.759	0.728	0.825	11.12
Dichlorodifluoromethane			2.368	2.544	2.510	2.466	2.501	2.610	2.619	2.520	2.365	2.500	3.62
Chloromethane			1.548	1.495	1.314	1.288	1.351	1.341	1.333	1.282	1.223	1.353	7.69
1,2-Dichlorotetrafluoroethane			1.809	1.738	1.733	1.714	1.688	1.728	1.756	1.689	1.610	1.718	3.18
Vinyl Chloride			0.925	0.963	0.879	0.887	0.868	0.910	0.931	0.869	0.860	0.899	3.89
1,3-Butadiene			1.002	0.877	0.721	0.718	0.719	0.723	0.745	0.706	0.697	0.768	13.43
Bromomethane				0.937	0.961	0.894	0.896	0.913	0.925	0.898	0.882	0.913	2.89
Chloroethane			0.545	0.406	0.380	0.382	0.349	0.361	0.364	0.351	0.345	0.387	16.09
Ethanol					0.445	0.410	0.347	0.348	0.329	0.295	0.301	0.354	15.72
Acetone						1.834	1.728	1.789	1.736	2.008	1.959	1.842	6.34
Trichlorofluoromethane		2.830	2.743	2.691	2.717	2.705	2.751	2.797	2.720	2.588	2.727	2.51	
Isopropylalcohol						1.936	2.001	2.201	2.097	1.845	2.069	2.025	6.20
Acrylonitrile			0.749	0.729	0.720	0.703	0.740	0.720	0.711	0.696	0.721	2.48	
1,1-Dichloroethene		1.765	1.836	1.691	1.623	1.666	1.684	1.702	1.655	1.632	1.695	4.00	
Methylene Chloride		2.105	1.619	1.485	1.391	1.375	1.370	1.255	1.298	1.487	18.41		
Carbon Disulfide		2.474	2.424	2.336	2.382	2.407	2.456	2.373	2.365	2.402	1.98		
Trichlorotrifluoroethane		2.025	1.984	1.890	1.930	1.935	1.984	2.012	1.958	1.910	1.959	2.35	
Trans-1,2-Dichloroethene		1.788	1.644	1.520	1.555	1.563	1.596	1.587	1.538	1.523	1.590	5.27	
1,1-Dichloroethane		1.741	1.786	1.747	1.784	1.766	1.787	1.792	1.757	1.720	1.765	1.42	
Methyl tert-butyl ether(MTBE)			2.644	2.508	2.351	1.932	2.315	2.448	2.381	2.306	2.361	8.76	
Methyl Ethyl Ketone			2.326	2.418	2.644	2.482	2.486	2.520	2.324	2.297	2.437	4.88	
Cis-1,2-Dichloroethene		1.609	1.450	1.409	1.459	1.459	1.488	1.502	1.487	1.468	1.481	3.72	
Hexane	1.685	1.567	1.411	1.441	1.422	1.402	1.434	1.922	1.535	12.01			
Chloroform	2.321	2.315	2.150	2.213	2.193	2.256	2.238	2.220	2.133	2.227	2.92		
Ethyl acetate	4.122	2.949	2.952	3.060	3.018	3.079	3.006	2.909	3.137	12.82			

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, q, qi, qfi, qi2, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ63027

Instrument ID: CHEM24

Calibration Date From: 10/12/21 21:15

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 02:07

GC Column: \_\_\_\_\_

Method File: 24AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_05.D</u>	<u>RRF2</u>	<u>1012_06.D</u>	<u>RRF3</u>	<u>1012_07.D</u>	<u>RRF4</u>	<u>1012_08.D</u>	<u>RRF5</u>	<u>1012_09.D</u>	<u>RRF6</u>	<u>1012_10.D</u>			
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD	
Tetrahydrofuran					0.783	0.901	0.830	0.759	0.767	0.774	0.733	0.711	0.782	7.59	
1,2-Dichloroethane				1.646	1.572	1.642	1.661	1.662	1.640	1.691	1.692	1.643	1.650	2.14	
1,1,1-Trichloroethane				2.536	2.635	2.342	2.279	2.342	2.401	2.392	2.356	2.278	2.396	4.93	
Benzene				2.685	2.336	2.395	2.316	2.306	2.338	2.371	2.362	2.295	2.378	5.03	
Carbon Tetrachloride				2.552	2.728	2.635	2.678	2.602	2.684	2.738	2.716	2.603	2.660	2.44	
Cyclohexane					1.816	1.605	1.531	1.510	1.587	1.592	1.543	1.501	1.586	6.36	
1,2-dichloropropane				0.322	0.351	0.328	0.320	0.317	0.328	0.329	0.331	0.330	0.329	2.97	
Bromodichloromethane				0.704	0.721	0.674	0.694	0.678	0.708	0.732	0.729	0.724	0.707	3.04	
Trichloroethene				0.355	0.404	0.378	0.386	0.382	0.388	0.401	0.394	0.401	0.388	3.97	
1,4-Dioxane				0.142	0.162	0.156	0.145	0.133	0.158	0.153	0.143	0.149	0.149	6.22	
Heptane				0.843	0.657	0.591	0.566	0.561	0.595	0.574	0.582	0.573	0.616	14.59	
cis-1,3-Dichloropropene				0.458	0.509	0.457	0.473	0.462	0.475	0.478	0.492	0.491	0.477	3.66	
4-Methyl-2-pentanone(MIBK)					0.885	0.823	0.803	0.789	0.856	0.843	0.843	0.820	0.833	3.68	
trans-1,3-Dichloropropene				0.497	0.464	0.447	0.470	0.478	0.478	0.490	0.493	0.492	0.479	3.44	
1,1,2-Trichloroethane				0.436	0.360	0.352	0.364	0.337	0.345	0.355	0.357	0.358	0.363	7.93	
Toluene				0.826	0.860	0.824	0.855	0.844	0.854	0.876	0.888	0.869	0.855	2.51	
Dibromochloromethane				0.708	0.797	0.801	0.809	0.807	0.827	0.860	0.828	0.866	0.812	5.65	
2-Hexanone(MBK)					0.859	0.760	0.750	0.735	0.837	0.822	0.643	0.837	0.780	9.28	
1,2-Dibromoethane(EDB)				0.586	0.636	0.616	0.637	0.639	0.652	0.671	0.645	0.679	0.640	4.32	
Tetrachloroethene				0.506	0.520	0.487	0.512	0.516	0.512	0.533	0.525	0.530	0.516	2.69	
1,1,1,2-Tetrachloroethane				0.974	1.007	0.988	0.990	0.986	0.996	1.055	1.028	1.008	1.004	2.47	
Chlorobenzene					1.537	1.521	1.553	1.519	1.515	1.535	1.597	1.568	1.533	1.542	1.72
Ethylbenzene					2.172	2.505	2.315	2.412	2.353	2.342	2.492	2.463	2.370	2.380	4.36
m,p-Xylene				1.724	1.878	1.875	1.525	1.811	1.847	1.966	1.922	1.734	1.809	7.36	
Bromoform				1.459	1.514	1.606	1.533	1.539	1.586	1.681	1.710	1.650	1.586	5.24	

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, q2i, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ63027

Instrument ID: CHEM24

Calibration Date From: 10/12/21 21:15

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 02:07

GC Column: \_\_\_\_\_

Method File: 24AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_05.D</u>	<u>RRF2</u>	<u>1012_06.D</u>	<u>RRF3</u>	<u>1012_07.D</u>	<u>RRF4</u>	<u>1012_08.D</u>	<u>RRF5</u>	<u>1012_09.D</u>	<u>RRF6</u>	<u>1012_10.D</u>		
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD
Styrene				1.397	1.314	1.403	1.366	1.334	1.341	1.436	1.448	1.385	1.380	3.33
1,1,2,2-Tetrachloroethane				1.609	1.504	1.508	1.512	1.497	1.494	1.566	1.606	1.521	1.535	3.00
o-Xylene				1.997	2.329	2.276	2.253	2.198	2.204	2.321	2.115	1.982	2.186	5.92
Isopropylbenzene				2.743	2.654	2.560	2.551	2.551	2.512	2.725	2.660	2.525	2.609	3.37
4-Ethyltoluene				2.565	2.718	2.602	2.697	2.644	2.618	2.793	2.773	2.625	2.670	2.95
1,3,5-Trimethylbenzene				2.280	2.222	2.202	2.223	2.208	2.185	2.318	2.298	2.184	2.236	2.24
1,2,4-Trimethylbenzene				2.351	2.245	2.174	2.267	2.213	2.191	2.317	2.359	2.230	2.261	3.00
Benzyl chloride				1.629	1.619	1.618	1.609	1.716	1.662	1.846	1.968	1.852	1.724	7.65
1,3-Dichlorobenzene				1.435	1.431	1.468	1.465	1.477	1.423	1.599	1.623	1.544	1.496	4.99
1,4-Dichlorobenzene				1.328	1.392	1.394	1.408	1.432	1.374	1.501	1.558	1.509	1.433	5.20
sec-Butylbenzene				3.079	3.139	3.130	3.072	3.047	3.059	3.252	3.193	2.988	3.107	2.60
4-Isopropyltoluene				2.821	2.545	2.695	2.631	2.606	2.599	2.764	2.772	2.573	2.667	3.71
1,2-Dichlorobenzene				1.171	1.211	1.217	1.200	1.210	1.165	1.283	1.270	1.270	1.222	3.55
n-Butylbenzene				2.180	1.892	1.977	2.070	2.088	2.091	2.233	2.207	2.103	2.094	5.19
1,2,4-Trichlorobenzene					0.398	0.450	0.505	0.461	0.400	0.563	0.586	0.715	0.510	21.09
Hexachlorobutadiene				0.802	0.751	0.787	0.800	0.755	0.680	0.756	0.733	0.759	0.758	4.97
1,2-Dichlorotetrafluoroethane(sim)	1.959	1.872	1.835	1.732	1.644	1.652	1.637	1.608	1.646				1.732	7.29
Vinyl Chloride(sim)		0.931	0.926	0.933	0.911	0.909	0.931	0.920	0.953				0.927	1.49
Bromomethane(sim)	0.947	1.010	1.007	0.982	0.920	0.917	0.868	0.852	0.872				0.930	6.45
Trichlorofluoromethane(sim)	2.539	2.547	2.639	2.644	2.714	2.712	2.720	2.749	2.818				2.676	3.45
1,1,1-Trichloroethane(sim)	1.866	2.232	2.242	2.417	2.544	2.236	2.177	2.231	2.292				2.248	8.17
Benzene(sim)	2.704	2.700	2.689	2.453	2.430	2.389	2.366	2.387					2.515	6.13
Carbon Tetrachloride(sim)	2.207	2.375	2.761	2.407	2.484	2.515	2.556	2.475	2.562				2.482	6.11
1,1-Dichloroethene(sim)	1.691	1.587	1.735	1.688	1.706	1.715	1.709	1.727	1.759				1.702	2.85
Trichlorotrifluoroethane(sim)	1.877	1.784	1.905	1.939	1.861	1.795	1.842	1.846	1.894				1.860	2.71

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, qi2, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ63027

Instrument ID: CHEM24

Calibration Date From: 10/12/21 21:15

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 02:07

GC Column: \_\_\_\_\_

Method File: 24AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_05.D</u>	<u>RRF2</u>	<u>1012_06.D</u>	<u>RRF3</u>	<u>1012_07.D</u>	<u>RRF4</u>	<u>1012_08.D</u>	<u>RRF5</u>	<u>1012_09.D</u>	<u>RRF6</u>	<u>1012_10.D</u>		
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD
		0.02	0.035	0.05	0.1	0.2	0.5	1	2.5	5	10	25	40	
Trans-1,2-Dichloroethene(sim)		1.648	1.565	1.541	1.578	1.595	1.577	1.600	1.607	1.642				1.595 2.18
1,1-Dichloroethane(sim)		1.417	1.793	2.004	1.668	1.690	1.668	1.703	1.680	1.706				1.703 8.90
Cis-1,2-Dichloroethene(sim)		1.362	1.480	1.506	1.466	1.477	1.497	1.536	1.516	1.591				1.492 4.13
Chloroform(sim)		1.844	2.134	2.342	2.223	2.190	2.081	2.112	2.089	2.153				2.130 6.30
1,2-Dichloroethane(sim)		1.208	1.573	1.632	1.621	1.684	1.674	1.692	1.717	1.724				1.614 9.91
1,2-dichloropropane(sim)		0.296	0.330	0.345	0.324	0.349	0.338	0.350	0.346	0.358				0.337 5.54
Bromodichloromethane(sim)		0.516	0.676	0.746	0.681	0.711	0.690	0.694	0.678	0.708				0.678 9.50
Trichloroethene(sim) <span style="color: red;">○</span>		0.296	0.377	0.387	0.384	0.405	0.395	0.410	0.401	0.417				0.386 <span style="color: red;">○</span> 9.37 <span style="color: red;">○</span>
1,4-Dioxane(sim)				0.180	0.142	0.162	0.156	0.147	0.133	0.158				0.154 9.87
cis-1,3-Dichloropropene(sim)		0.485	0.448	0.473	0.472	0.495	0.491	0.516	0.502					0.485 4.31
1,1,2-Trichloroethane(sim)		0.463	0.333	0.386	0.436	0.365	0.353	0.366	0.338	0.345				0.376 12.05
Dibromochloromethane(sim)		0.771	0.657	0.784	0.753	0.812	0.810	0.838	0.827	0.861				0.790 7.65
1,2-Dibromoethane(EDB)(sim)		0.708	0.550	0.608	0.586	0.636	0.617	0.637	0.639	0.652				0.626 7.07
Tetrachloroethene(sim)		0.440	0.450	0.529	0.504	0.541	0.529	0.552	0.542	0.554	0.567			0.521 8.35
Bromoform(sim) <span style="color: red;">○</span>		1.969	1.411	1.537	1.511	1.623	1.662	1.600	1.595	1.633				1.616 <span style="color: red;">○</span> 9.47 <span style="color: red;">○</span>
1,1,1,2-Tetrachloroethane(sim)		1.229	0.873	1.121	0.947	1.002	0.984	0.991	0.985	0.995				1.014 10.16
Ethylbenzene(sim)		3.086	2.186	2.463	2.358	2.566	2.551	2.592	2.544					2.543 10.15
m,p-Xylene(sim)			1.856	1.785	1.779	1.878	1.875	1.906	1.812	1.847				1.842 2.50
o-Xylene(sim) <span style="color: red;">○</span>		3.179	2.273	2.365	2.251	2.389	2.380	2.423	2.378					2.455 <span style="color: red;">○</span> 12.16 <span style="color: red;">○</span>
1,1,2,2-Tetrachloroethane(sim)		2.368	2.247	1.480	1.602	1.504	1.540	1.512	1.497	1.494				1.694 20.73
Benzyl chloride(sim)		2.178	1.803	1.724	1.599	1.622	1.735	1.757	1.849	1.792				1.784 9.44
1,3-Dichlorobenzene(sim)		2.179	1.633	1.453	1.441	1.427	1.466	1.465	1.477	1.422				1.551 15.71
1,4-Dichlorobenzene(sim)		2.155	1.716	1.582	1.489	1.546	1.590	1.590	1.631	1.562				1.651 12.03
sec-Butylbenzene(sim)			3.960	3.344	3.079	3.139	3.127	3.068	3.048	3.060				3.228 9.63
4-Isopropyltoluene(sim)			3.345	3.050	2.738	2.727	2.792	2.760	2.786	2.789				2.873 7.53

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, q2i, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

**Client:**

Lab Code: Phoenix

SDG No.: GCJ63027

Instrument ID: CHEM24

Calibration Date From: 10/12/21 21:15

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 02:07

GC Column:

Method File: 24AIR 1012.M

## Laboratory File Ids

RRF1	1012_05.D	RRF2	1012_06.D	RRF3	1012_07.D	RRF4	1012_08.D	RRF5	1012_09.D	RRF6	1012_10.D				
RRF7	1012_16.D	RRF8	1012_11.D	RRF9	1012_12.D	RRF10	1012_17.D	RRF11	1012_13.D	RRF12	1012_14.D				
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RRF	% RSD
1,2-Dichlorobenzene(sim)		1.845	1.425	1.178	1.163	1.188	1.217	1.201	1.209	1.165				1.288	17.37
n-Butylbenzene(sim)			2.483	2.350	2.171	2.131	2.162	2.232	2.260	2.284				2.259	5.10
1,2,4-Trichlorobenzene(sim)		0.734	0.534	0.582	0.403	0.401	0.451	0.504	0.461					0.509	21.67
Hexachlorobutadiene(sim)			1.159	1.010	0.882	0.839	0.861	0.878	0.826	0.762				0.902	13.86
% Bromofluorobenzene					1.383	1.403	1.410	1.408	1.423	1.399	1.424	1.461	1.407	1.413	1.54

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, q2, qfi2) display concentrations and not response factors

8A

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027  
Lab Method / File Id: 24AIR\_1012.M / Average Date Analyzed: 10/13/21  
Instrument ID: CHEM24 Time Analyzed: 1:34  
GC Column: \_\_\_\_\_ ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

- \* Values outside of QC limits.

## FORM VIII VOA

8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Sim Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027  
Lab Method / File Id: 24AIR\_1012.M / Average Date Analyzed: 10/13/21  
Instrument ID: CHEM24 Time Analyzed: 1:34  
GC Column: \_\_\_\_\_ ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## FORM VIII VOA

# Injection Log

Data Directory: H:\AIR2021\CHEM4\100CT\12\

Line	V1	FileName	SampleName	MscInfo	Injection Time
1)	46	1012_01.D	xxxxxxxxxxxx		10/12/21 17:01
2)	47	1012_02.D	xxxxxxxxxxxx		10/12/21 17:32
3)	48	1012_03.D	xxxxxxxxxxxx		10/12/21 18:03
4)	49	1012_04.D	BFB TUNE	0/0	10/12/21 18:34
5)	47	1012_05.D	ICAL 0.02	0.02 ppb	10/12/21 19:05
6)	48	1012_06.D	ICAL 0.035	0.035 ppb	10/12/21 19:37
7)	49	1012_07.D	ICAL 0.05	0.05 ppb	10/12/21 20:09
8)	50	1012_08.D	ICAL 0.1	0.10 ppb	10/12/21 20:41
9)	51	1012_09.D	ICAL 0.2	0.20 ppb	10/12/21 21:15
10)	52	1012_10.D	ICAL 0.5	0.50 ppb	10/12/21 21:51
11)	53	1012_11.D	ICAL 2.5	2.5 ppb	10/12/21 22:28
12)	54	1012_12.D	ICAL 5	5.0 ppb	10/12/21 23:00
13)	55	1012_13.D	ICAL 25	25 ppb	10/12/21 23:36
14)	56	1012_14.D	ICAL 40	40 ppb	10/13/21 0:29
15)	57	1012_15.D	xxxxxxxxxxxx		10/13/21 1:01
16)	58	1012_16.D	ICAL 1	1ppb ;	10/13/21 1:34
17)	59	1012_17.D	ICAL 10	10ppb ;	10/13/21 2:07
18)	60	1012_18.D	xxxxxxxxxxxx		10/13/21 2:44
19)	61	1012_19.D	xxxxxxxxxxxx		10/13/21 3:15
20)	62	1012_20.D	xxxxxxxxxxxx		10/13/21 3:46
21)	63	1012_21.D	xxxxxxxxxxxx		10/13/21 4:19
22)	64	1012_22.D	xxxxxxxxxxxx		10/13/21 4:53
23)	65	1012_23.D	xxxxxxxxxxxx		10/13/21 5:29
24)	66	1012_24.D	CANISTER BLK 2277	CANISTER BLK 2277	10/13/21 6:05
25)	67	1012_25.D	xxxxxxxxxxxx		10/13/21 6:42
26)	68	1012_26.D	xxxxxxxxxxxx		10/13/21 7:18
27)	69	1012_27.D	xxxxxxxxxxxx		10/13/21 7:55
28)	70	1012_28.D	xxxxxxxxxxxx		10/13/21 8:56
29)	71	1012_29.D	xxxxxxxxxxxx		10/13/21 9:51
30)	72	1012_30.D	xxxxxxxxxxxx		10/13/21 10:22
31)	73	1012_31.D	xxxxxxxxxxxx		10/13/21 10:52
32)	74	1012_32.D	xxxxxxxxxxxx		10/13/21 12:10
33)	75	1012_33.D	xxxxxxxxxxxx		10/13/21 12:52
34)	76	1012_34.D	xxxxxxxxxxxx		10/13/21 13:34
35)	77	1012_35.D	xxxxxxxxxxxx		10/13/21 14:10
36)	78	1012_36.D	xxxxxxxxxxxx		10/13/21 14:47
37)	79	1012_37.D	xxxxxxxxxxxx		10/13/21 15:24
38)	80	1012_38.D	xxxxxxxxxxxx		10/13/21 16:00
39)	81	1012_39.D	xxxxxxxxxxxx		10/13/21 16:37
40)	82	1012_40.D	xxxxxxxxxxxx		10/13/21 17:09
41)	83	1012_41.D	xxxxxxxxxxxx		10/13/21 17:42
42)	84	1012_42.D	xxxxxxxxxxxx		10/13/21 18:19
43)	85	1012_43.D	xxxxxxxxxxxx		10/13/21 19:01
44)	86	1012_44.D	xxxxxxxxxxxx		10/13/21 19:42
45)	87	1012_45.D	xxxxxxxxxxxx		10/13/21 22:27
46)	88	1012_46.D	xxxxxxxxxxxx		10/13/21 23:01
47)	89	1012_47.D	xxxxxxxxxxxx		10/13/21 23:34

5B  
AIR INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63027

Lab File ID: 1021\_01.D

BFB Injection Date:

10/21/21

Instrument ID: CHEM20

BFB Injection Time:

12:25

GC Column: RTX-1 60M

Heated Purge: (Y/N)

Y

AutoFind: Scans 779, 780, 781; Background Corrected with Scan 774

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	29.9
75	30.0 - 66.0% of mass 95	49.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 ( 0.0 )1
174	50.0 - 120.0% of mass 95	86.8
175	4.0 - 9.0% of mass 174	7.7 ( 6.7 )1
176	93.0 - 101.0% of mass 174	96.3 ( 83.6 )1
177	5.0 - 9.0% of mass 176	6.2 ( 5.2 )1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01 CCAL 1	1ppb ccal	1021_01.D	10/21/21	12:25	
02 CJ61772 LCS	CJ61772 LCS	1021_03.D	10/21/21	13:39	
03 CJ61772 QC	CJ61772 QC	1021_05.D	10/21/21	14:53	
04 61772 dup	CJ61772 DUP	1021_06.D	10/21/21	15:33	
05 CJ61772 BLANK	CJ61772 BLANK	1021_07.D	10/21/21	16:07	
06 IA-3	CJ63027	1021_21.D	10/22/21	01:16	
07 SV-4 5X	CJ63028 5X	1021_22.D	10/22/21	01:53	
08 SV-5 5X	CJ63029 5X	1021_23.D	10/22/21	02:29	
09 SV-6 5X	CJ63031 5X	1021_25.D	10/22/21	03:42	
10					
11					
12					
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24					
25					

(\*) Outside 24 hr clock

FORM V AIR

7A  
AIR CONTINUING CALIBRATION CHECK

brackets IA-3, SV-4[5X], SV-5[5X],  
SV-6[5X]

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027

Instrument: CHEM20 Calibration Date: 10/21/21 Time: 12:25

Lab File Id: 1021\_01.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:21 05:11

GC Column: RTX-1 60M Method File: 20\_AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
Propylene	1.183	1.442		-21.9	30
Dichlorodifluoromethane	2.411	2.750		-14.1	30
Chloromethane	1.259	1.511		-20.0	30
1,2-Dichlorotetrafluoroethane	2.276	2.578		-13.3	30
Vinyl Chloride	1.002	1.092		-9.0	30
1,3-Butadiene	1.007	1.125		-11.7	30
Bromomethane	0.881	0.898		-1.9	30
Chloroethane	0.455	0.441		3.1	30
Ethanol	0.545	0.708		-29.9	30
Acetone	2.229	2.576		-15.6	30
Trichlorofluoromethane	2.606	2.968		-13.9	30
Isopropylalcohol	2.978	3.172		-6.5	30
Acrylonitrile	1.054	1.002		4.9	30
1,1-Dichloroethene	1.993	2.017		-1.2	30
Methylene Chloride	1.943	2.153		-10.8	30
Carbon Disulfide	2.696	2.782		-3.2	30
Trichlorotrifluoroethane	2.140	2.241		-4.7	30
Trans-1,2-Dichloroethene	1.772	1.805		-1.9	30
1,1-Dichloroethane	1.978	2.001		-1.2	30
Methyl tert-butyl ether(MTBE)	2.561	2.718		-6.1	30
Methyl Ethyl Ketone	3.201	3.288		-2.7	30
Cis-1,2-Dichloroethene	1.395	1.054		24.4	30
Hexane	2.041	1.984		2.8	30
Chloroform	2.152	2.213		-2.8	30
Ethyl acetate	0.425	0.423		0.5	30
Tetrahydrofuran	1.835	1.882		-2.6	30
1,2-Dichloroethane	1.513	1.674		-10.6	30
1,1,1-Trichloroethane	2.276	2.431		-6.8	30
Benzene	3.026	2.707	10.5	30	
Carbon Tetrachloride	2.357	2.515		-6.7	30
Cyclohexane	1.420	1.557		-9.6	30
1,2-dichloropropane	0.368	0.352		4.3	30
Bromodichloromethane	0.576	0.558		3.1	30
Trichloroethene	0.383	0.378		1.3	30
1,4-Dioxane	0.163	0.161		1.2	30

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027

Instrument: CHEM20 Calibration Date: 10/21/21 Time: 12:25

Lab File Id: 1021\_01.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:21 05:11

GC Column: RTX-1 60M Method File: 20\_AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	LIMITS
Heptane	0.827	0.903		-9.2	30
cis-1,3-Dichloropropene	0.426	0.403		5.4	30
4-Methyl-2-pentanone(MIBK)	1.106	1.209		-9.3	30
trans-1,3-Dichloropropene	0.381	0.364		4.5	30
1,1,2-Trichloroethane	0.331	0.313		5.4	30
Toluene	0.945	0.887		6.1	30
Dibromochloromethane	0.615	0.585		4.9	30
2-Hexanone(MBK)	0.888	0.912		-2.7	30
1,2-Dibromoethane(EDB)	0.493	0.443		10.1	30
Tetrachloroethene	0.490	0.479		2.2	30
1,1,1,2-Tetrachloroethane	0.974	1.110		-14.0	30
Chlorobenzene	1.539	1.573		-2.2	30
Ethylbenzene	2.620	2.634		-0.5	30
m,p-Xylene	1.971	1.619		17.9	30
Bromoform	1.182	1.224		-3.6	30
Styrene	1.427	1.336		6.4	30
1,1,2,2-Tetrachloroethane	1.483	1.464		1.3	30
o-Xylene	2.110	2.187		-3.6	30
Isopropylbenzene	2.877	3.023		-5.1	30
4-Ethyltoluene	2.875	2.851		0.8	30
1,3,5-Trimethylbenzene	2.531	2.668		-5.4	30
1,2,4-Trimethylbenzene	2.544	2.613		-2.7	30
Benzyl chloride	5.284	5.416		-2.5	30
1,3-Dichlorobenzene	1.367	1.188		13.1	30
1,4-Dichlorobenzene	1.197	1.032		13.8	30
sec-Butylbenzene	3.662	3.622		1.1	30
4-Isopropyltoluene	3.555	3.678		-3.5	30
1,2-Dichlorobenzene	1.403	1.375		2.0	30
n-Butylbenzene	2.771	2.720		1.8	30
1,2,4-Trichlorobenzene	qfi 1.000	0.63	37.0 #	20	
Hexachlorobutadiene	1.326	1.413	-6.6		30
1,2-Dichlorotetrafluoroethane(sim)	2.278	2.239		1.7	30
Vinyl Chloride(sim)	1.074	1.043		2.9	30
Bromomethane(sim)	0.903	0.782		13.4	30
Trichlorofluoromethane(sim)	2.701	2.819		-4.4	30

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027

Instrument: CHEM20 Calibration Date: 10/21/21 Time: 12:25

Lab File Id: 1021\_01.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:21 05:11

GC Column: RTX-1 60M Method File: 20\_AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
1,2-Dichloroethane(sim)	1.473	1.458		1.0	30
1,1,1-Trichloroethane(sim)	2.349	2.310		1.7	30
Benzene(sim)	2.905	2.361		18.7	30
Carbon Tetrachloride(sim)	2.218	2.388		-7.7	30
1,1-Dichloroethene(sim)	1.865	1.757		5.8	30
Trichlorotrifluoroethane(sim)	2.221	2.131		4.1	30
Trans-1,2-Dichloroethene(sim)	1.717	1.572		8.4	30
1,1-Dichloroethane(sim)	2.072	1.978		4.5	30
Cis-1,2-Dichloroethene(sim)	1.462	1.482		-1.4	30
Chloroform(sim)	2.174	2.071		4.7	30
1,2-dichloropropane(sim)	0.428	0.385		10.0	30
Bromodichloromethane(sim)	0.617	0.559		9.4	30
Trichloroethene(sim)	0.463	0.434		6.3	30
1,4-Dioxane(sim)	0.163	0.161		1.2	30
cis-1,3-Dichloropropene(sim)	0.473	0.425		10.1	30
1,1,2-Trichloroethane(sim)	0.354	0.313		11.6	30
Dibromochloromethane(sim)	0.704	0.665		5.5	30
1,2-Dibromoethane(EDB)(sim)	0.530	0.443		16.4	30
Tetrachloroethene(sim)	0.611	0.588		3.8	30
Bromoform(sim)	1.510	1.440		4.6	30
m,p-Xylene(sim)	2.292	2.038		11.1	30
1,1,2,2-Tetrachloroethane(sim)	1.781	1.605		9.9	30
Benzyl chloride(sim)	1.368	1.252		8.5	30
1,3-Dichlorobenzene(sim)	1.551	1.430		7.8	30
1,4-Dichlorobenzene(sim)	1.228	1.019		17.0	30
sec-Butylbenzene(sim)	4.443	4.225		4.9	30
4-Isopropyltoluene(sim)	4.107	3.695		10.0	30
1,2-Dichlorobenzene(sim)	1.705	1.581		7.3	30
n-Butylbenzene(sim)	2.836	2.720		4.1	30
1,2,4-Trichlorobenzene(sim)	qfi	1.000	0.70	within +/- 30 - no qual	30.0 # 20
Hexachlorobutadiene(sim)		1.983	1.864		6.0
% Bromofluorobenzene		1.229	1.233		-0.3

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.



8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Full Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
 Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027  
 Lab Method / File Id: 20\_AIR\_1012.M / 1021\_01.D Date Analyzed: 10/21/21  
 Instrument ID: CHEM20 Time Analyzed: 12:25  
 GC Column: RTX-1 60M ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #			LAB FILE ID
REFERENCE STD	274685	6.62	1082481	7.78	468450	10.31			1021_01.D
UPPER LIMIT	385932	6.95	1520886	8.11	658172	10.64			1021_01.D
LOWER LIMIT	163438	6.29	644076	7.45	278728	9.98			1021_01.D
CLIENT ID									
01 CCAL 1	274685	6.62	1082481	7.78	468450	10.31			1021_01.D
02 CJ61772 LCS	292237	6.63	1147332	7.78	545881	10.31			1021_03.D
03 CJ61772 QC	284349	6.63	1116969	7.78	473590	10.31			1021_05.D
04 61772 dup	271127	6.62	1088252	7.78	459127	10.31			1021_06.D
05 CJ61772 BLANK	289879	6.63	1152225	7.78	490875	10.31			1021_07.D
06 IA-3	272075	6.63	1056238	7.78	463030	10.31			1021_21.D
07 SV-4 5X	269518	6.63	1070869	7.78	517185	10.31			1021_22.D
08 SV-5 5X	296112	6.64	1164978	7.79	552574	10.31			1021_23.D
09 SV-6 5X	279204	6.63	1106656	7.78	494846	10.31			1021_25.D
10									
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22									

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

FORM VIII VOA

8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Sim Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
 Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027  
 Lab Method / File Id: 20\_AIR\_1012.M / 1021\_01.D Date Analyzed: 10/21/21  
 Instrument ID: CHEM20 Time Analyzed: 12:25  
 GC Column: RTX-1 60M ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #			LAB FILE ID
REFERENCE STD	315392	6.62	1081344	7.78	468450	10.31			1021_01.D
UPPER LIMIT	443126	6.95	1519288	8.11	658172	10.64			1021_01.D
LOWER LIMIT	187658	6.29	643400	7.45	278728	9.98			1021_01.D
CLIENT ID									
01 CCAL 1	315392	6.62	1081344	7.78	468450	10.31			1021_01.D
02 CJ61772 LCS	330064	6.63	1147332	7.78	545643	10.31			1021_03.D
03 CJ61772 QC	320689	6.62	1116969	7.78	473765	10.31			1021_05.D
04 61772 dup	314075	6.62	1087267	7.78	459005	10.31			1021_06.D
05 CJ61772 BLANK	330185	6.62	1150664	7.78	490875	10.31			1021_07.D
06 IA-3	302314	6.62	1056152	7.78	463030	10.31			1021_21.D
07 SV-4 5X	304510	6.63	1070663	7.78	588962	10.31			1021_22.D
08 SV-5 5X	333676	6.64	1164978	7.79	552574	10.31			1021_23.D
09 SV-6 5X	311164	6.63	1106656	7.78	493738	10.31			1021_25.D
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22									

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

FORM VIII VOA

# Injection Log

Data Directory: H:\AIR2021\CHEM20\100CT\20A\

Line	V1	FileName	SampleName	MscInfo	Injection Time
1)	0	1022_04.D	xxxxxxxxxxxx		N/A
2)	1	1020_01.D	xxxxxxxxxxxx		10/20/21 16:14
3)	2	1020_02.D	xxxxxxxxxxxx		10/20/21 16:50
4)	3	1020_03.D	xxxxxxxxxxxx		10/20/21 17:26
5)	4	1020_04.D	xxxxxxxxxxxx		10/20/21 18:04
6)	5	1020_05.D	xxxxxxxxxxxx		10/20/21 18:38
7)	6	1020_06.D	xxxxxxxxxxxx		10/20/21 19:12
8)	7	1020_07.D	xxxxxxxxxxxx		10/20/21 19:52
9)	8	1020_08.D	xxxxxxxxxxxx		10/20/21 20:32
10)	9	1020_09.D	xxxxxxxxxxxx		10/20/21 21:11
11)	10	1020_10.D	xxxxxxxxxxxx		10/20/21 21:50
12)	11	1020_11.D	xxxxxxxxxxxx		10/20/21 22:28
13)	12	1020_12.D	xxxxxxxxxxxx		10/20/21 23:07
14)	13	1020_13.D	xxxxxxxxxxxx		10/20/21 23:46
15)	14	1020_14.D	xxxxxxxxxxxx		10/21/21 0:25
16)	15	1020_15.D	xxxxxxxxxxxx		10/21/21 1:03
17)	16	1020_16.D	xxxxxxxxxxxx		10/21/21 1:42
18)	17	1020_17.D	xxxxxxxxxxxx		10/21/21 2:22
19)	18	1020_18.D	xxxxxxxxxxxx		10/21/21 3:17
20)	19	1020_19.D	xxxxxxxxxxxx		10/21/21 3:56
21)	20	1020_20.D	xxxxxxxxxxxx		10/21/21 4:35
22)	21	1020_21.D	xxxxxxxxxxxx		10/21/21 5:14
23)	22	1020_22.D	xxxxxxxxxxxx		10/21/21 5:53
24)	23	1020_23.D	xxxxxxxxxxxx		10/21/21 6:33
25)	24	1020_24.D	xxxxxxxxxxxx		10/21/21 7:13
26)	25	1020_25.D	xxxxxxxxxxxx		10/21/21 7:52
27)	26	1020_26.D	xxxxxxxxxxxx		10/21/21 8:33
28)	27	1020_27.D	xxxxxxxxxxxx		10/21/21 9:12
29)	28	1020_28.D	xxxxxxxxxxxx		10/21/21 9:52
30)	29	1020_29.D	xxxxxxxxxxxx		10/21/21 10:31
31)	30	1020_30.D	xxxxxxxxxxxx		10/21/21 11:10
32)	31	1020_31.D	xxxxxxxxxxxx		10/21/21 11:49
33)	32	1021_01.D	BFB TUNE - CCAL 1	1ppb ccal - 1ppb cc	10/21/21 12:25
34)	33	1021_02.D	xxxxxxxxxxxx	CJ61772 LCS	10/21/21 13:01
35)	34	1021_03.D	CJ61772 LCS		10/21/21 13:39
36)	35	1021_04.D	xxxxxxxxxxxx	CJ61772 QC	10/21/21 14:13
37)	36	1021_05.D	CJ61772 QC		10/21/21 14:53
38)	37	1021_06.D	61772 dup	CJ61772 DUP	10/21/21 15:33
39)	38	1021_07.D	CJ61772 BLANK	CJ61772 BLANK	10/21/21 16:07
40)	39	1021_08.D	xxxxxxxxxxxx		10/21/21 16:46
41)	40	1021_09.D	xxxxxxxxxxxx		10/21/21 17:26
42)	41	1021_10.D	xxxxxxxxxxxx		10/21/21 18:06
43)	42	1021_11.D	xxxxxxxxxxxx		10/21/21 18:45
44)	43	1021_12.D	xxxxxxxxxxxx		10/21/21 19:23
45)	44	1021_13.D	xxxxxxxxxxxx		10/21/21 20:02
46)	45	1021_14.D	xxxxxxxxxxxx		10/21/21 20:42
47)	46	1021_15.D	xxxxxxxxxxxx		10/21/21 21:20
48)	47	1021_16.D	xxxxxxxxxxxx		10/21/21 22:00
49)	48	1021_17.D	xxxxxxxxxxxx		10/21/21 22:39
50)	49	1021_18.D	xxxxxxxxxxxx		10/21/21 23:18
51)	50	1021_19.D	xxxxxxxxxxxx		10/21/21 23:56
52)	51	1021_20.D	xxxxxxxxxxxx		10/22/21 0:35
53)	52	1021_21.D	IA-3	CJ63027	10/22/21 1:16
54)	53	1021_22.D	SV-4 5X	CJ63028 5X	10/22/21 1:53
55)	54	1021_23.D	SV-5 5X	CJ63029 5X	10/22/21 2:29
56)	55	1021_24.D	xxxxxxxxxxxx		10/22/21 3:06
57)	56	1021_25.D	SV-6 5X	CJ63031 5X	10/22/21 3:42
58)	57	1021_26.D	xxxxxxxxxxxx		10/22/21 4:19
59)	58	1021_27.D	xxxxxxxxxxxx		10/22/21 4:55
60)	59	1021_28.D	xxxxxxxxxxxx		10/22/21 5:32
61)	60	1021_29.D	xxxxxxxxxxxx		10/22/21 6:08
62)	61	1021_30.D	xxxxxxxxxxxx		10/22/21 7:39
63)	62	1021_31.D	xxxxxxxxxxxx		10/22/21 8:23
64)	1	1022_01.D	xxxxxxxxxxxx		10/22/21 10:23
65)	2	1022_02.D	xxxxxxxxxxxx		10/22/21 10:59
66)	3	1022_03.D	xxxxxxxxxxxx		10/22/21 11:35

5B  
AIR INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63027

Lab File ID: 1022\_02.D

BFB Injection Date: 10/22/21

Instrument ID: CHEM20

BFB Injection Time: 10:59

GC Column: RTX-1 60M

Heated Purge: (Y/N) Y

AutoFind: Scans 779, 780, 781; Background Corrected with Scan 775

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	29.5
75	30.0 - 66.0% of mass 95	50.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9 ✓
173	Less than 2.0% of mass 174	0.1 ( 0.1 )1
174	50.0 - 120.0% of mass 95	86.9 ✓
175	4.0 - 9.0% of mass 174	7.8 ✓ ( 6.7 )1
176	93.0 - 101.0% of mass 174	94.6 ( 82.2 )1
177	5.0 - 9.0% of mass 176	6.5 ( 5.3 )1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01 CCAL 1	1ppb ccal	1022_02.D	10/22/21	10:59	✓
02 CJ63030 LCS	CJ63030 LCS	1022_04.D	10/22/21	12:13	
03 CJ63030 BLANK	CJ63030 BLANK	1022_06.D	10/22/21	13:20	
04 IA-2	CJ63030	1022_07.D	10/22/21	14:28	
05 IA-2 DUP	CJ63030 DUP	1022_08.D	10/22/21	15:10	
06 SV-4 15X	CJ63028 15X	1022_11.D	10/22/21	17:00	
07 SV-5 160X	CJ63029 160X	1022_12.D	10/22/21	17:36	
08 SV-5 800X	CJ63029 800X	1022_13.D	10/22/21	18:11	
09 SV-6 15X	CJ63031 15X	1022_14.D	10/22/21	18:47	
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

(\*) Outside 24 hr clock

FORM V AIR

7A  
AIR CONTINUING CALIBRATION CHECK

brackets IA-2, SV-4[15X], SV-5[160X],  
SV-5[800X], and SV-6[15X]

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027

Instrument: CHEM20 Calibration Date: 10/22/21 Time: 10:59

Lab File Id: 1022\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:21 05:11

GC Column: RTX-1 60M Method File: 20\_AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
Propylene	1.183	1.335		-12.8	30
Dichlorodifluoromethane	2.411	2.645		-9.7	30
Chloromethane	1.259	1.468		-16.6	30
1,2-Dichlorotetrafluoroethane	2.276	2.457		-8.0	30
Vinyl Chloride	1.002	1.090		-8.8	30
1,3-Butadiene	1.007	1.078		-7.1	30
Bromomethane	0.881	0.905		-2.7	30
Chloroethane	0.455	0.451	J sample IA-2;	0.9	30
Ethanol	0.545	0.756	all others not reported from bracketed samples	-38.7 #	30 J sample IA-2
Acetone	2.229	2.576		-15.6	30
Trichlorofluoromethane	2.606	2.949		-13.2	30
Isopropylalcohol	2.978	3.245		-9.0	30
Acrylonitrile	1.054	1.185		-12.4	30
1,1-Dichloroethene	1.993	2.005		-0.6	30
Methylene Chloride	1.943	2.157		-11.0	30
Carbon Disulfide	2.696	2.688		0.3	30
Trichlorotrifluoroethane	2.140	2.158		-0.8	30
Trans-1,2-Dichloroethene	1.772	1.823		-2.9	30
1,1-Dichloroethane	1.978	2.030		-2.6	30
Methyl tert-butyl ether(MTBE)	2.561	2.638		-3.0	30
Methyl Ethyl Ketone	3.201	3.437		-7.4	30
Cis-1,2-Dichloroethene	1.395	1.034		25.9	30
Hexane	2.041	2.104		-3.1	30
Chloroform	2.152	2.271		-5.5	30
Ethyl acetate	0.425	0.417		1.9	30
Tetrahydrofuran	1.835	1.976		-7.7	30
1,2-Dichloroethane	1.513	1.721		-13.7	30
1,1,1-Trichloroethane	2.276	2.405		-5.7	30
Benzene	3.026	2.756		8.9	30
Carbon Tetrachloride	2.357	2.459		-4.3	30
Cyclohexane	1.420	1.579		-11.2	30
1,2-dichloropropane	0.368	0.342		7.1	30
Bromodichloromethane	0.576	0.578		-0.3	30
Trichloroethene	0.383	0.377		1.6	30
1,4-Dioxane	0.163	0.158		3.1	30

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027

Instrument: CHEM20 Calibration Date: 10/22/21 Time: 10:59

Lab File Id: 1022\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:21 05:11

GC Column: RTX-1 60M Method File: 20\_AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	LIMITS
Heptane	0.827	0.951		-15.0	30
cis-1,3-Dichloropropene	0.426	0.409		4.0	30
4-Methyl-2-pentanone(MIBK)	1.106	1.129		-2.1	30
trans-1,3-Dichloropropene	0.381	0.346		9.2	30
1,1,2-Trichloroethane	0.331	0.302		8.8	30
Toluene	0.945	0.863		8.7	30
Dibromochloromethane	0.615	0.566		8.0	30
2-Hexanone(MBK)	0.888	0.896		-0.9	30
1,2-Dibromoethane(EDB)	0.493	0.442		10.3	30
Tetrachloroethene	0.490	0.476		2.9	30
1,1,1,2-Tetrachloroethane	0.974	1.114		-14.4	30
Chlorobenzene	1.539	1.560		-1.4	30
Ethylbenzene	2.620	2.634		-0.5	30
m,p-Xylene	1.971	1.694		14.1	30
Bromoform	1.182	1.167		1.3	30
Styrene	1.427	1.361		4.6	30
1,1,2,2-Tetrachloroethane	1.483	1.422		4.1	30
o-Xylene	2.110	2.130		-0.9	30
Isopropylbenzene	2.877	3.043		-5.8	30
4-Ethyltoluene	2.875	2.906 <span style="color: pink;">○</span>		-1.1 <span style="color: pink;">○</span>	30
1,3,5-Trimethylbenzene	2.531	2.823		-11.5	30
1,2,4-Trimethylbenzene	2.544	2.623		-3.1	30
Benzyl chloride	5.284	5.444		-3.0	30
1,3-Dichlorobenzene	1.367	1.249		8.6	30
1,4-Dichlorobenzene	1.197	1.047		12.5	30
sec-Butylbenzene	3.662	3.855		-5.3	30
4-Isopropyltoluene	3.555	3.705		-4.2	30
1,2-Dichlorobenzene	1.403	1.374		2.1	30
n-Butylbenzene	2.771	2.716		2.0	30
1,2,4-Trichlorobenzene	qfi 1.000	0.64	full scan not reported from bracketed samples, no eval		36.0 # 20
Hexachlorobutadiene	1.326	1.402		-5.7	30
1,2-Dichlorotetrafluoroethane(sim)	2.278	2.198		3.5	30
Vinyl Chloride(sim)	1.074	1.070		0.4	30
Bromomethane(sim)	0.903	0.810		10.3	30
Trichlorofluoromethane(sim)	2.701	2.875		-6.4	30

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027

Instrument: CHEM20 Calibration Date: 10/22/21 Time: 10:59

Lab File Id: 1022\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:21 05:11

GC Column: RTX-1 60M Method File: 20\_AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
1,2-Dichloroethane(sim)	1.473	1.542		-4.7	30
1,1,1-Trichloroethane(sim)	2.349	2.402		-2.3	30
Benzene(sim)	2.905	2.468		15.0	30
Carbon Tetrachloride(sim)	2.218	2.452		-10.6	30
1,1-Dichloroethene(sim)	1.865	1.796		3.7	30
Trichlorotrifluoroethane(sim)	2.221	2.134		3.9	30
Trans-1,2-Dichloroethene(sim)	1.717	1.633		4.9	30
1,1-Dichloroethane(sim)	2.072	2.007		3.1	30
Cis-1,2-Dichloroethene(sim)	1.462	1.517		-3.8	30
Chloroform(sim)	2.174	2.139		1.6	30
1,2-dichloropropane(sim)	0.428	0.381		11.0	30
Bromodichloromethane(sim)	0.617	0.578		6.3	30
Trichloroethene(sim)	0.463	0.429		7.3	30
1,4-Dioxane(sim)	0.163	0.158		3.1	30
cis-1,3-Dichloropropene(sim)	0.473	0.419		11.4	30
1,1,2-Trichloroethane(sim)	0.354	0.300		15.3	30
Dibromochloromethane(sim)	0.704	0.653		7.2	30
1,2-Dibromoethane(EDB)(sim)	0.530	0.441 <span style="color: pink;">◎</span>		16.8 <span style="color: pink;">◎</span>	30
Tetrachloroethene(sim)	0.611	0.581		4.9	30
Bromoform(sim)	1.510	1.399		7.4	30
m,p-Xylene(sim)	2.292	2.121		7.5	30
1,1,2,2-Tetrachloroethane(sim)	1.781	1.578		11.4	30
Benzyl chloride(sim)	1.368	1.320		3.5	30
1,3-Dichlorobenzene(sim)	1.551	1.425		8.1	30
1,4-Dichlorobenzene(sim)	1.228	1.039		15.4	30
sec-Butylbenzene(sim)	4.443	4.258		4.2	30
4-Isopropyltoluene(sim)	4.107	3.687		10.2	30
1,2-Dichlorobenzene(sim)	1.705	1.565		8.2	30
n-Butylbenzene(sim)	2.836	2.727		3.8	30
1,2,4-Trichlorobenzene(sim)	qfi	1.000	0.71 <span style="color: pink;">within +/- 30 - no qual</span>	29.0 #	20
Hexachlorobutadiene(sim)		1.983	1.853		6.6
% Bromofluorobenzene		1.229	1.242		-1.1

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

**8A**  
**AIR INTERNAL STANDARD AREA AND RT SUMMARY**  
**Full Scan**

Lab Name:	<u>Phoenix Environmental Labs</u>	Client:	<u> </u>
Lab Code:	<u>Phoenix</u>	Case No.:	<u> </u> SAS No.: <u> </u> SDG No.: <u>GCJ63027</u>
Lab Method / File Id:	<u>20_AIR_1012.M / 1022_02.D</u>		Date Analyzed: <u>10/22/21</u>
Instrument ID:	<u>CHEM20</u>		Time Analyzed: <u>10:59</u>
GC Column:	<u>RTX-1 60M</u>	ID: <u>0.18</u> (mm)	Heated Purge:(Y/N) <u>Y</u>

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## FORM VIII VOA

**8A**  
**AIR INTERNAL STANDARD AREA AND RT SUMMARY**  
**Sim Scan**

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027  
Lab Method / File Id: 20\_AIR\_1012.M / 1022\_02.D Date Analyzed: 10/22/21  
Instrument ID: CHEM20 Time Analyzed: 10:59  
GC Column: RTX-1 60M ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS1 (DFM) = Difluoromethane

IS2 (DTB) = 1,4-Dinitrobenzene

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

- \* Values outside of QC limits.

FORM VIII VOA

# Injection Log

Data Directory: H:\AIR2021\CHEM20\100CT\22\

Line	Vl	FileName	SampleName	MscInfo	Injection Time
1)	0	1022_29.D	xxxxxxxxxxxx		N/A
2)	1	1022_01.D	xxxxxxxxxxxx		10/22/21 10:23
3)	2	1022_02.D	BFB TUNE - CCAL 1	1ppb ccal - 1ppb cc	10/22/21 10:59
4)	3	1022_03.D	xxxxxxxxxxxx		10/22/21 11:35
5)	4	1022_04.D	CJ63030 LCS		10/22/21 12:13
6)	5	1022_05.D	xxxxxxxxxxxx		10/22/21 12:46
7)	6	1022_06.D	CJ63030 BLANK		10/22/21 13:20
8)	7	1022_07.D	IA-2	CJ63030	10/22/21 14:28
9)	8	1022_08.D	IA-2 DUP	CJ63030 DUP	10/22/21 15:10
10)	9	1022_09.D	xxxxxxxxxxxx		10/22/21 15:48
11)	10	1022_10.D	xxxxxxxxxxxx		10/22/21 16:24
12)	11	1022_11.D	SV-4 15X	CJ63028 15X	10/22/21 17:00
13)	12	1022_12.D	SV-5 160X	CJ63029 160X	10/22/21 17:36
14)	13	1022_13.D	SV-5 800X	CJ63029 800X	10/22/21 18:11
15)	14	1022_14.D	SV-6 15X	CJ63031 15X	10/22/21 18:47
16)	15	1022_15.D	xxxxxxxxxxxx		10/22/21 19:23
17)	16	1022_16.D	xxxxxxxxxxxx		10/22/21 20:00
18)	17	1022_17.D	xxxxxxxxxxxx		10/22/21 20:36
19)	18	1022_18.D	xxxxxxxxxxxx		10/22/21 21:12
20)	19	1022_19.D	xxxxxxxxxxxx		10/22/21 21:49
21)	20	1022_20.D	xxxxxxxxxxxx		10/22/21 22:25
22)	21	1022_21.D	xxxxxxxxxxxx		10/22/21 23:03
23)	22	1022_22.D	xxxxxxxxxxxx		10/22/21 23:39
24)	23	1022_23.D	xxxxxxxxxxxx		10/23/21 0:16
25)	24	1022_24.D	xxxxxxxxxxxx		10/23/21 0:52
26)	25	1022_25.D	xxxxxxxxxxxx		10/23/21 1:29
27)	26	1022_26.D	xxxxxxxxxxxx		10/23/21 3:06
28)	27	1022_27.D	xxxxxxxxxxxx		10/23/21 3:44
29)	28	1022_28.D	xxxxxxxxxxxx		10/23/21 4:20

5B  
AIR INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63027

Lab File ID: 1025\_02.D

BFB Injection Date:

10/25/21

Instrument ID: CHEM24

BFB Injection Time:

10:48 ✓

GC Column: RTX-VMS

Heated Purge: (Y/N)

Y

AutoFind: Scans 1626, 1627, 1628; Background Corrected with Scan 1618

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.9 ✓
75	30.0 - 66.0% of mass 95	51.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 ( 0.0 )1
174	50.0 - 120.0% of mass 95	90.6
175	4.0 - 9.0% of mass 174	7.9 ✓ ( 7.2 )1
176	93.0 - 101.0% of mass 174	97.3 ( 88.1 )1
177	5.0 - 9.0% of mass 176	6.3 ( 5.6 )1

1-Value is % mass 95 ✓

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01 CCAL 1	1ppb cCal ;	1025_02.D	10/25/21	10:48	✓
02 CJ63844 LCS	CJ63844 LCS	1025_04.D	10/25/21	11:57	
03 CJ63844 BLANK	CJ63844 BLANK	1025_06.D	10/25/21	12:59	
04 SV-4 30X	CJ63028 30X	1025_07.D	10/25/21	13:31	
05 CJ63844 QC	CJ63844 QC	1025_10.D	10/25/21	15:20	
06 63844 dup	CJ63844 DUP	1025_11.D	10/25/21	15:56	✓
07					
08					
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17					
18					
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25					

(\*) Outside 24 hr clock

FORM V AIR

7A  
AIR CONTINUING CALIBRATION CHECK

SV-4[30X]

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027

Instrument: CHEM24 Calibration Date: 10/25/21 Time: 10:48 ✓

Lab File Id: 1025\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:05 02:07

GC Column: RTX-VMS Method File: 24AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
Propylene	0.825	0.847		-2.7	30
Dichlorodifluoromethane	2.500	2.804		-12.2	30
Chloromethane	1.353	1.493		-10.3	30
1,2-Dichlorotetrafluoroethane	1.718	1.767		-2.9	30
Vinyl Chloride	0.899	0.925		-2.9	30
1,3-Butadiene	0.768	0.779		-1.4	30
Bromomethane	0.913	0.953		-4.4	30
Chloroethane	0.387	0.397		-2.6	30
Ethanol	0.354	0.452		-27.7	30
Acetone	1.842	2.135		-15.9	30
Trichlorofluoromethane	2.727	3.031		-11.1	30
Isopropylalcohol	2.025	2.232		-10.2	30
Acrylonitrile	0.721	0.734		-1.8	30
1,1-Dichloroethene	1.695	1.756		-3.6	30
Methylene Chloride	1.487	1.470		1.1	30
Carbon Disulfide	2.402	2.815		-17.2	30
Trichlorotrifluoroethane	1.959	2.020		-3.1	30
Trans-1,2-Dichloroethene	1.590	1.525		4.1	30
1,1-Dichloroethane	1.765	1.831		-3.7	30
Methyl tert-butyl ether(MTBE)	2.361	2.038	(*)	13.7	30
Methyl Ethyl Ketone	2.437	2.567		-5.3	30
Cis-1,2-Dichloroethene	1.481	1.499		-1.2	30
Hexane	1.535	1.388		9.6	30
Chloroform	2.227	2.229		-0.1	30
Ethyl acetate	3.137	3.150		-0.4	30
Tetrahydrofuran	0.782	0.812		-3.8	30
1,2-Dichloroethane	1.650	1.761		-6.7	30
1,1,1-Trichloroethane	2.396	2.458		-2.6	30
Benzene	2.378	2.308		2.9	30
Carbon Tetrachloride	2.660	2.802		-5.3	30
Cyclohexane	1.586	1.521		4.1	30
1,2-dichloropropane	0.329	0.317		3.6	30
Bromodichloromethane	0.707	0.728		-3.0	30
Trichloroethene	0.388	0.381		1.8	30
1,4-Dioxane	0.149	0.129		13.4	30

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027

Instrument: CHEM24 Calibration Date: 10/25/21 Time: 10:48

Lab File Id: 1025\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:05 02:07

GC Column: RTX-VMS Method File: 24AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	LIMITS
Heptane	0.616	0.633		-2.8	30
cis-1,3-Dichloropropene	0.477	0.449		5.9	30
4-Methyl-2-pentanone(MIBK)	0.833	0.798		4.2	30
trans-1,3-Dichloropropene	0.479	0.458		4.4	30
1,1,2-Trichloroethane	0.363	0.343		5.5	30
Toluene	0.855	0.844		1.3	30
Dibromochloromethane	0.812	0.797		1.8	30
2-Hexanone(MBK)	0.780	0.720		7.7	30
1,2-Dibromoethane(EDB)	0.640	0.649		-1.4	30
Tetrachloroethene	0.516	0.505		2.1	30
1,1,1,2-Tetrachloroethane	1.004	1.023		-1.9	30
Chlorobenzene	1.542	1.493		3.2	30
Ethylbenzene	2.380	2.363		0.7	30
m,p-Xylene	1.809	1.468		18.9	30
Bromoform	1.586	1.332		16.0	30
Styrene	1.380	1.261		8.6	30
1,1,2,2-Tetrachloroethane	1.535	1.490		2.9	30
o-Xylene	2.186	2.112		3.4	30
Isopropylbenzene	2.609	2.477		5.1	30
4-Ethyltoluene	2.670	2.570		3.7	30
1,3,5-Trimethylbenzene	2.236	2.185		2.3	30
1,2,4-Trimethylbenzene	2.261	2.148		5.0	30
Benzyl chloride	1.724	1.474		14.5	30
1,3-Dichlorobenzene	1.496	1.425		4.7	30
1,4-Dichlorobenzene	1.433	1.395		2.7	30
sec-Butylbenzene	3.107	2.923		5.9	30
4-Isopropyltoluene	2.667	2.425		9.1	30
1,2-Dichlorobenzene	1.222	1.089		10.9	30
n-Butylbenzene	2.094	1.931		7.8	30
1,2,4-Trichlorobenzene	0.510	0.393		22.9	30
Hexachlorobutadiene	0.758	0.679		10.4	30
1,2-Dichlorotetrafluoroethane(sim)	1.732	1.662		4.0	30
Vinyl Chloride(sim)	0.927	0.958 <span style="color: pink;">*</span>		-3.3 <span style="color: pink;">*</span>	30
Bromomethane(sim)	0.930	0.896		3.7	30
Trichlorofluoromethane(sim)	2.676	3.010		-12.5	30

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.



7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027

Instrument: CHEM24 Calibration Date: 10/25/21 Time: 10:48

Lab File Id: 1025\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:05 02:07

GC Column: RTX-VMS Method File: 24AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	LIMITS
1,1,1-Trichloroethane(sim)	2.248	2.311		-2.8	30
Benzene(sim)	2.515	2.320		7.8	30
Carbon Tetrachloride(sim)	2.482	2.637		-6.2	30
1,1-Dichloroethene(sim)	1.702	1.798		-5.6	30
Trichlorotrifluoroethane(sim)	1.860	1.893		-1.8	30
Trans-1,2-Dichloroethene(sim)	1.595	1.615		-1.3	30
1,1-Dichloroethane(sim)	1.703	1.723		-1.2	30
Cis-1,2-Dichloroethene(sim)	1.492	1.551		-4.0	30
Chloroform(sim)	2.130	2.095		1.6	30
1,2-Dichloroethane(sim)	1.614	1.800		-11.5	30
1,2-dichloropropane(sim)	0.337	0.351		-4.2	30
Bromodichloromethane(sim)	0.678	0.728		-7.4	30
Trichloroethene(sim)	0.386	0.411		-6.5	30
1,4-Dioxane(sim)	0.154	0.129		16.2	30
cis-1,3-Dichloropropene(sim)	0.485	0.506		-4.3	30
1,1,2-Trichloroethane(sim)	0.376	0.343		8.8	30
Dibromochloromethane(sim)	0.790	0.837		-5.9	30
1,2-Dibromoethane(EDB)(sim)	0.626	0.649		-3.7	30
Tetrachloroethene(sim)	0.521	0.556		-6.7	30
Bromoform(sim)	1.616	1.391		13.9	30
1,1,1,2-Tetrachloroethane(sim)	1.014	1.023		-0.9	30
Ethylbenzene(sim)	2.543	2.547		-0.2	30
m,p-Xylene(sim)	1.842	1.835		0.4	30
o-Xylene(sim)	2.455	2.350		4.3	30
1,1,2,2-Tetrachloroethane(sim)	1.694	1.490		12.0	30
Benzyl chloride(sim)	1.784	1.646		7.7	30
1,3-Dichlorobenzene(sim)	1.551	1.422		8.3	30
1,4-Dichlorobenzene(sim)	1.651	1.559		5.6	30
sec-Butylbenzene(sim)	3.228	2.923		9.4	30
4-Isopropyltoluene(sim)	2.873	2.696		6.2	30
1,2-Dichlorobenzene(sim)	1.288	1.085		15.8	30
n-Butylbenzene(sim)	2.259	2.121		6.1	30
1,2,4-Trichlorobenzene(sim)	0.509	0.395		22.4	30
Hexachlorobutadiene(sim)	0.902	0.778		13.7	30
% Bromofluorobenzene	1.413	1.423		-0.7	30

(\*) Recommended RRF not met   (+) %D exceeds criteria %   (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.



8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Full Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
 Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027  
 Lab Method / File Id: 24AIR\_1012.M / 1025\_02.D Date Analyzed: 10/25/21  
 Instrument ID: CHEM24 Time Analyzed: 10:48  
 GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #			LAB FILE ID
REFERENCE STD	375828	5.17	1308331	7.12	654866	10.73			1025_02.D
UPPER LIMIT	528038	5.50	1838205	7.45	920087	11.06			1025_02.D
LOWER LIMIT	223618	4.84	778457	6.79	389645	10.40			1025_02.D
CLIENT ID									
01 CCAL 1	375828	5.17	1308331	7.12	654866	10.73			1025_02.D
02 CJ63844 LCS	376620	5.17	1314242	7.12	672864	10.73			1025_04.D
03 CJ63844 BLANK	364335	5.17	1286489	7.13	651784	10.73			1025_06.D
04 SV-4 30X	361296	5.16	1263365	7.12	640523	10.73			1025_07.D
05 CJ63844 QC	351781	5.17	1245489	7.13	639974	10.73			1025_10.D
06 63844 dup	363893	5.17	1262004	7.13	634692	10.73			1025_11.D
07									
08									
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21									
22									

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

FORM VIII VOA

8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Sim Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
 Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63027  
 Lab Method / File Id: 24AIR\_1012.M / 1025\_02.D Date Analyzed: 10/25/21  
 Instrument ID: CHEM24 Time Analyzed: 10:48  
 GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #			LAB FILE ID
REFERENCE STD	399320	5.16	1308331	7.12	654866	10.73			1025_02.D
UPPER LIMIT	561045	5.49	1838205	7.45	920087	11.06			1025_02.D
LOWER LIMIT	237595	4.83	778457	6.79	389645	10.40			1025_02.D
CLIENT ID									
01 CCAL 1	399320	5.16	1308331	7.12	654866	10.73			1025_02.D
02 CJ63844 LCS	400063	5.16	1314242	7.12	672864	10.73			1025_04.D
03 CJ63844 BLANK	393351	5.17	1286489	7.13	651784	10.73			1025_06.D
04 SV-4 30X	389429	5.16	1263365	7.12	640523	10.73			1025_07.D
05 CJ63844 QC	380228	5.17	1245489	7.13	639974	10.73			1025_10.D
06 63844 dup	387969	5.17	1262004	7.13	634692	10.73			1025_11.D
07									
08									
09									
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11									
12									
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14									
15									
16									
17									
18									
19									
20									
21									
22									

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

FORM VIII VOA

# Injection Log

Data Directory: H:\AIR2021\CHEM4\100CT\25\

Line	V1	FileName	SampleName	MscInfo	Injection Time
1)	31	1025_01.D	xxxxxxxxxx		10/25/21 10:15
2)	32	1025_02.D	BFB TUNE - CCAL 1	1ppb cCal ; - 1ppb	10/25/21 10:48
3)	33	1025_03.D	xxxxxxxxxx		10/25/21 11:21
4)	34	1025_04.D	CJ63844 LCS	CJ63844 LCS	10/25/21 11:57
5)	35	1025_05.D	xxxxxxxxxx		10/25/21 12:28
6)	36	1025_06.D	CJ63844 BLANK	CJ63844 BLANK	10/25/21 12:59
7)	37	1025_07.D	SV-4 30X	CJ63028 30X	10/25/21 13:31
8)	38	1025_08.D	xxxxxxxxxx		10/25/21 14:07
9)	39	1025_09.D	xxxxxxxxxx		10/25/21 14:44
10)	40	1025_10.D	CJ63844 QC	CJ63844 QC	10/25/21 15:20
11)	41	1025_11.D	63844 dup	CJ63844 DUP	10/25/21 15:56
12)	41	1025_12.D	xxxxxxxxxx		10/25/21 16:32
13)	42	1025_13.D	xxxxxxxxxx		10/25/21 17:04
14)	43	1025_14.D	xxxxxxxxxx		10/25/21 17:37
15)	44	1025_15.D	xxxxxxxxxx		10/25/21 18:08
16)	45	1025_16.D	xxxxxxxxxx		10/25/21 18:40
17)	46	1025_17.D	xxxxxxxxxx		10/25/21 19:12
18)	47	1025_18.D	xxxxxxxxxx		10/25/21 19:45
19)	48	1025_19.D	xxxxxxxxxx		10/25/21 20:17
20)	49	1025_20.D	xxxxxxxxxx		10/25/21 20:49
21)	50	1025_21.D	xxxxxxxxxx		10/25/21 21:22
22)	51	1025_22.D	xxxxxxxxxx		10/25/21 21:54
23)	52	1025_23.D	xxxxxxxxxx		10/26/21 2:44
24)	53	1025_24.D	xxxxxxxxxx		10/26/21 3:20
25)	54	1025_25.D	xxxxxxxxxx		10/26/21 3:57
26)	55	1025_26.D	xxxxxxxxxx		10/26/21 4:33
27)	56	1025_27.D	xxxxxxxxxx		10/26/21 5:09
28)	57	1025_28.D	xxxxxxxxxx		10/26/21 9:29
29)	58	1025_29.D	xxxxxxxxxx		10/26/21 10:03

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

IA-3	
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Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63027
Canister:	28591	Lab File ID:	1021_21.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200 (cc)	Date Analyzed:	10/22/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	3.40		0.202	0.202	r
74-87-3	Chloromethane	33.3		0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	820	ES	0.531	0.531	r
67-64-1	Acetone	35.6	S	0.421	0.421	r
75-69-4	Trichlorofluoromethane	0.299		0.178	0.178	r
67-63-0	Isopropylalcohol	21.3	S	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.864	U	0.864	0.864	r
75-15-0	Carbon Disulfide	0.387		0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	2.95		0.339	0.339	r
110-54-3	Hexane	2.03	S	0.284	0.284	r
67-66-3	Chloroform	0.325		0.205	0.205	r
141-78-6	Ethyl acetate	2.38		0.278	0.278	r
109-99-9	Tetrahydrofuran	0.600		0.339	0.339	r
107-06-2	1,2-Dichloroethane	0.247	U	0.247	0.247	r
71-43-2	Benzene	1.12	○	0.313	0.313	r
110-82-7	Cyclohexane	0.785		0.291	0.291	r
142-82-5	Heptane N	1.32		0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.221	U	0.221	0.221	r
108-88-3	Toluene	8.05	○	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
630-20-6	1,1,1,2-Tetrachloroethane	0.146	U	0.146	0.146	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene	1.59	○	0.230	0.230	r
179601-23-1	m,p-Xylene	8.22		0.230	0.230	r
100-42-5	Styrene	0.391		0.235	0.235	r
95-47-6	o-Xylene	2.04		0.230	0.230	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.226		0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.256		0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.868		0.204	0.204	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63027
Canister:	28591	Lab File ID:	1021_21.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200	(cc)	Date Analyzed: 10/22/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

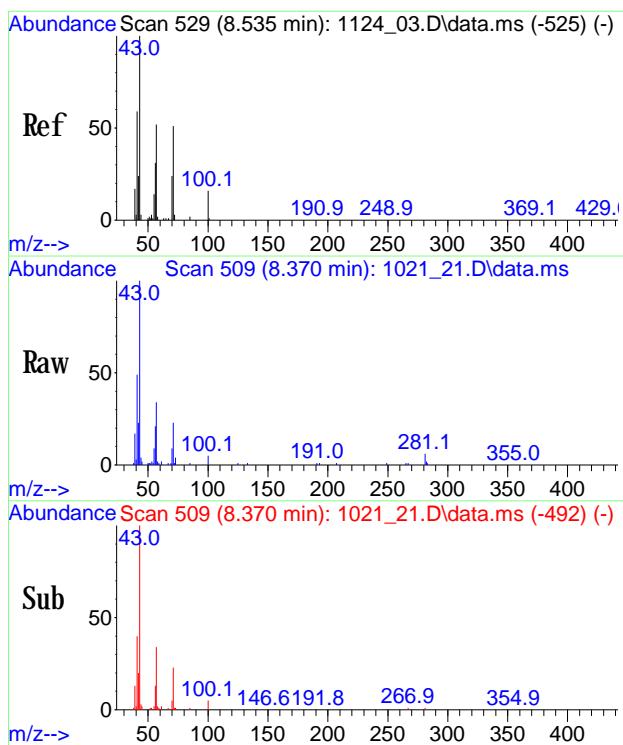
**Quantitation Report (QT Reviewed)**

Data Path : H:\AIR2021\CHEM20\100CT\20A\  
 Data File : 1021\_21.D  
 Acq On : 22 Oct 2021 1:16 am  
 Operator :  
 Client ID : IA-3  
 Lab ID : CJ63027  
 ALS Vial : 52 Sample Multiplier: 1

Quant Time: Oct 22 09:32:03 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 QLast Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

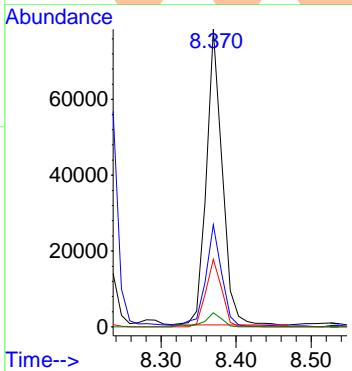
Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.627	130	272075	10.000	ng	0.00
37) 1, 4-Difluorobenzene	7.779	114	1056238	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	463030	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.622	130	302314	10.000	ng	#-0.01
96) 1, 4-Difluorobenzene(sim)	7.779	114	1056152	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	463030	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.159	95	572136	10.054	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	= 100.50%	
<b>Target Compounds</b>						
3) Dichlorodifluoromethane	3.572	85	223069	3.400	ppbv	98
4) Chloromethane	3.701	50	1141129	33.308	ppbv	97
11) Ethanol	4.423	45	12154771	819.873	ppbv	99
12) Acetone	4.747	43	2158431	35.593	ppbv#	87
13) Trichlorofluoromethane	4.811	101	21209	0.299	ppbv#	96
14) Isopropyl alcohol	5.005	45	1725759	21.299	ppbv#	55
20) Carbon Disulfide	5.493	76	28383	0.387	ppbv	98
26) Methyl Ethyl Ketone	6.291	43	256797	2.949	ppbv	96
28) Hexane	6.637	57	112556	2.027	ppbv	87
29) Chloroform	6.700	83	19004	0.325	ppbv	95
30) Ethyl acetate	6.668	61	27505	2.377	ppbv	95
31) Tetrahydrofuran	7.002	42	29934	0.600	ppbv	93
34) Benzene	7.579	78	92362	1.122	ppbv#	90
35) Carbon Tetrachloride	7.668	117	7449	0.116	ppbv	95
36) Cyclohexane	7.746	41	30298	0.784	ppbv	97
40) Trichloroethene	8.214	130	5582	0.138	ppbv#	80
44) Heptane	8.370	43	115156	1.319	ppbv#	84
49) Toluene	9.294	91	803041	8.049	ppbv	99
53) Tetrachloroethylene	9.944	166	7498	0.145	ppbv	96
57) Ethylbenzene	10.534	91	193027	1.591	ppbv	99
58) m,p-Xylene	10.626	91	749969	8.219	ppbv	99
60) Styrene	10.842	104	25815	0.391	ppbv	93
62) o-Xylene	10.903	91	199415	2.041	ppbv	99
67) 4-Ethyltoluene	11.652	105	30051	0.226	ppbv#	81
68) 1, 3, 5-Trimethylbenzene	11.652	105	30051	0.256	ppbv	96
69) 1, 2, 4-Trimethylbenzene	11.908	105	102263	0.868	ppbv	87
73) 1, 4-Dichlorobenzene	12.052	146	333324	6.012	ppbv	99
75) 4-Isopropyltoluene	12.165	119	33472	0.203	ppbv	96
85) Trichlorofluoromethane...	4.817	101	24290	0.297	ppbv#	100
86) 1, 2-Dichloroethane(sim)	7.148	62	18203	0.409	ppbv	96
88) Benzene(sim)	7.579	78	92362	1.052	ppbv#	90
89) Carbon Tetrachloride(sim)	7.674	117	7712	0.115	ppbv	98
95) Chloroform(sim)	6.705	83	19561	0.298	ppbv#	92
99) Trichloroethylene(sim)	8.219	130	7320	0.150	ppbv	99
105) Tetrachloroethylene(sim)	9.950	166	9136	0.141	ppbv	100
108) m,p-Xylene(sim)	10.626	91	752272	7.089	ppbv	99
114) 1, 4-Dichlorobenzene(sim)	12.052	146	333124	5.859	ppbv	99
116) 4-Isopropyltoluene(sim)	12.165	119	33557	0.176	ppbv	96

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

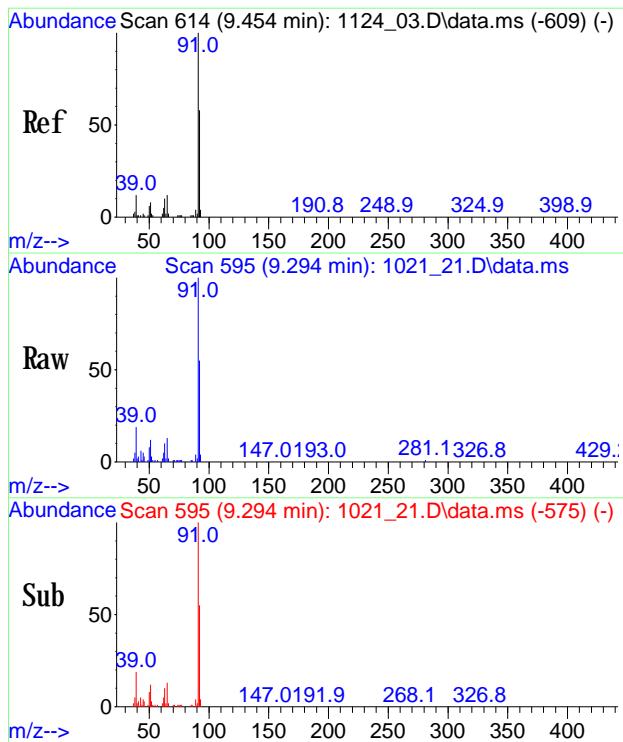


#44  
**Heptane**  
 Conc: 8\$ 1.319 ppbv  
 RT: 8.370 min Scan# 509  
 Delta R.T. -0.011 min  
 Lab File: 1021\_21.D  
 Acq: 22 Oct 2021 1:16 am

Tgt Ion: 43 Resp: 115156  
 Ion Ratio Lower Upper  
 43 100  
 57 34.3 35.5 53.3#  
 71 22.7 25.3 37.9#  
 100 5.2 9.6 14.4#

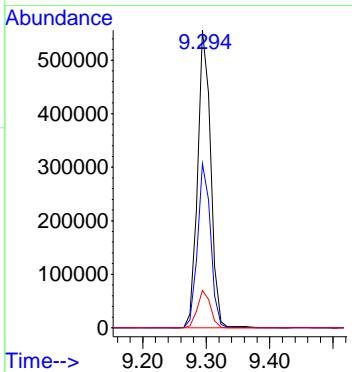


N - out of criteria ratios



#49  
**Toluene**  
 Conc: 8\$ 8.049 ppbv  
 RT: 9.294 min Scan# 595  
 Delta R.T. -0.010 min  
 Lab File: 1021\_21.D  
 Acq: 22 Oct 2021 1:16 am

Tgt Ion: 91 Resp: 803041  
 Ion Ratio Lower Upper  
 91 100  
 92 54.8 44.3 66.5  
 65 12.6 9.8 14.6



1  
AIR ANALYSIS DATA SHEET

CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	SV-4 5X
SDG No.:	GCJ63027	Lab Sample ID:	CJ63028 5X	
Canister:	21367	Lab File ID:	1021_22.D	
Instrument:	CHEM20	Column:	RTX-1 60M	Date Received: 10/21/21
Purge Volume	200 (cc)	Date Analyzed:	10/22/21	✓
Matrix:	AIR	Dilution Factor:	5	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	2.91	U	2.91	2.91	r
75-71-8	Dichlorodifluoromethane	7.23		1.01	1.01	r
74-87-3	Chloromethane	2.42	U	2.42	2.42	r
75-01-4	Vinyl Chloride	2.76		0.391	0.391	r
106-99-0	1,3-Butadiene N	8.26 ○		2.26	2.26	r
75-00-3	Chloroethane	1.90	U	1.90	1.90	r
64-17-5	Ethanol	157	S	2.66	2.66	r
67-64-1	Acetone	331	ES	2.11	2.11	
67-63-0	Isopropylalcohol	2.04	U	2.04	2.04	r
107-13-1	Acrylonitrile	2.31	U	2.31	2.31	r
75-35-4	1,1-Dichloroethene	23.9		0.252	0.252	r
75-09-2	Methylene Chloride	4.32	U	4.32	4.32	r
75-15-0	Carbon Disulfide	10.8		1.61	1.61	r
75-34-3	1,1-Dichloroethane	26.4		1.24	1.24	r
1634-04-4	Methyl tert-butyl ether(MTBE)	1.39	U	1.39	1.39	r
78-93-3	Methyl Ethyl Ketone	1.70	U	1.70	1.70	r
156-59-2	Cis-1,2-Dichloroethene	1.38		0.252	0.252	r
110-54-3	Hexane	24.3	S	1.42	1.42	r
67-66-3	Chloroform	15.3		1.02	1.02	r
141-78-6	Ethyl acetate	1.39	U	1.39	1.39	r
109-99-9	Tetrahydrofuran	34.7		1.70	1.70	r
71-55-6	1,1,1-Trichloroethane	743	E	0.917	0.917	
71-43-2	Benzene	4.28		1.57	1.57	r
110-82-7	Cyclohexane	5.87		1.45	1.45	r
79-01-6	Trichloroethene	162 ○		0.186	0.186	r
142-82-5	Heptane	7.98		1.22	1.22	r
108-10-1	4-Methyl-2-pentanone(MIBK)	1.22	U	1.22	1.22	r
10061-02-6	trans-1,3-Dichloropropene	1.10	U	1.10	1.10	r
108-88-3	Toluene	14.8		1.33	1.33	r
591-78-6	2-Hexanone(MBK)	1.22	U	1.22	1.22	r
127-18-4	Tetrachloroethene	542	E	0.184	0.184	
630-20-6	1,1,1,2-Tetrachloroethane	0.729	U	0.729	0.729	r
108-90-7	Chlorobenzene	1.09	U	1.09	1.09	r
100-41-4	Ethylbenzene	12.2		1.15	1.15	r
179601-23-1	m,p-Xylene	55.7		1.15	1.15	r
100-42-5	Styrene	1.17	U	1.17	1.17	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63028 5X
Canister:	21367	Lab File ID:	1021_22.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200	(cc)	Date Analyzed: 10/22/21
Matrix:	AIR	Dilution Factor:	5

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

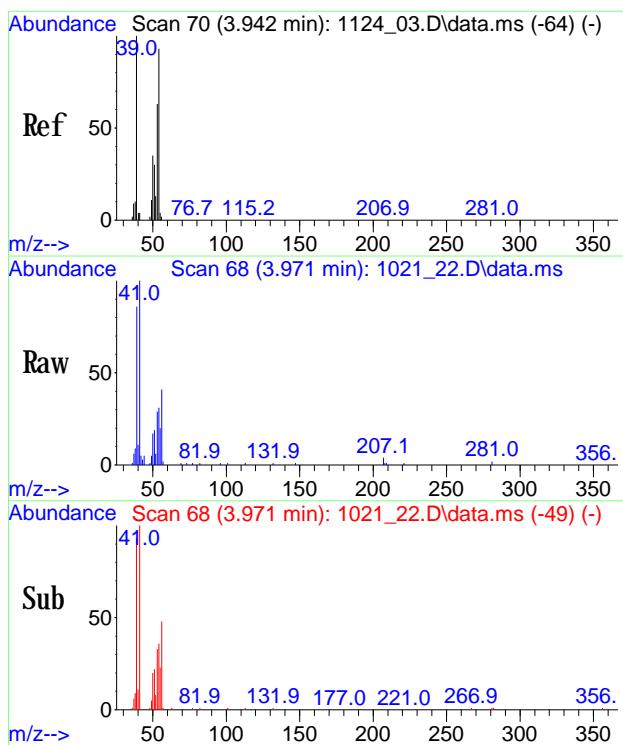
r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

**Quantitation Report (QT Reviewed)**

Data Path : H:\AIR2021\CHEM20\100CT\20A\  
 Data File : 1021\_22.D  
 Acq On : 22 Oct 2021 1:53 am  
 Operator :  
 Client ID : SV-4 5X  
 Lab ID : CJ63028 5X  
 ALS Vial : 53 Sample Multiplier: 1

Quant Time: Oct 22 09:35:24 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 Last Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

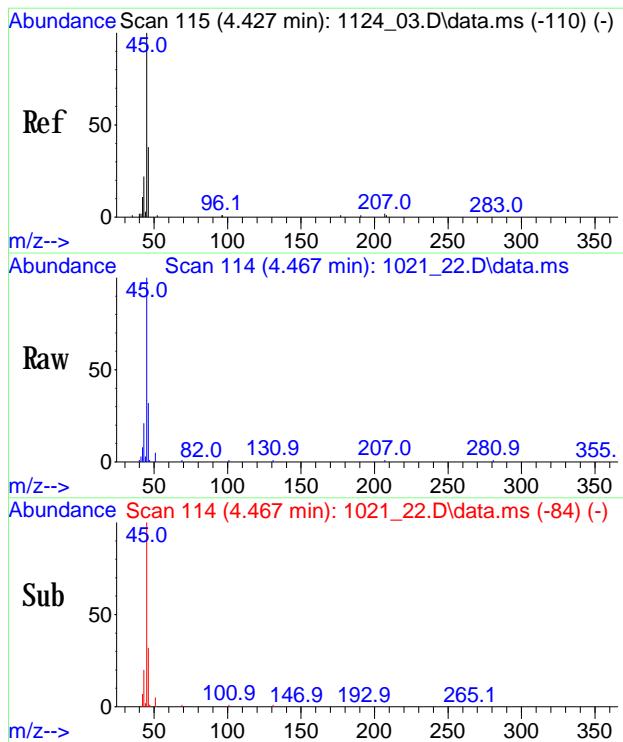
Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.627	130	269518	10.000	ng	0.00
37) 1, 4-Difluorobenzene	7.780	114	1070869	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	517185m	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.633	130	304510	10.000	ng	# 0.00
96) 1, 4-Difluorobenzene(sim)	7.780	114	1070663	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.315	82	588962m	10.000	ng	0.00
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.160	95	622334	9.791	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	= 97.90%	
<b>Target Compounds</b>						
3) Dichlorodifluoromethane	3.572	85	93902	1.445	ppbv	97
6) Vinyl Chloride	3.874	62	14881	0.551	ppbv	88
7) 1, 3-Butadiene	3.971	54	44802	1.651	ppbv#	9
11) Ethanol	4.467	45	461961	31.456	ppbv	98
12) Acetone	4.758	43	3978523	66.229	ppbv	90
16) 1, 1-Dichloroethene	5.226	61	257205	4.789	ppbv	95
20) Carbon Disulfide	5.493	76	156667	2.156	ppbv	97
23) 1, 1-Dichloroethane	6.008	63	281029	5.272	ppbv	100
27) Cis-1, 2-Dichloroethene	6.523	61	10318	0.274	ppbv	95
28) Hexane	6.637	57	267249	4.858	ppbv	88
29) Chloroform	6.700	83	177590	3.061	ppbv	96
31) Tetrahydrofuran	7.033	42	343008	6.935	ppbv#	89
33) 1, 1, 1-Trichloroethane	7.304	97	9114693	148.605	ppbv	97
34) Benzene	7.590	78	69787	0.856	ppbv#	90
35) Carbon Tetrachloride	7.679	117	3682	0.058	ppbv#	77
36) Cyclohexane	7.746	41	44915	1.174	ppbv#	88
40) Trichloroethene	8.214	130	1326953	32.326	ppbv	100
44) Heptane	8.370	43	141177	1.595	ppbv#	93
49) Toluene	9.294	91	300194	2.968	ppbv	99
53) Tetrachloroethene	9.954	166	5687718	108.308	ppbv	96
57) Ethylbenzene	10.534	91	329514	2.432	ppbv	99
58) m,p-Xylene	10.627	91	1135844	11.144	ppbv	98
62) o-Xylene	10.903	91	503475	4.614	ppbv	99
65) Isopropylbenzene	11.231	105	30121	0.202	ppbv	95
67) 4-Ethyltoluene	11.590	105	199821	1.344	ppbv#	97
68) 1, 3, 5-Trimethylbenzene	11.652	105	72015	0.550	ppbv#	94
69) 1, 2, 4-Trimethylbenzene	11.908	105	202304	1.538	ppbv#	84
73) 1, 4-Dichlorobenzene	12.052	146	13002	0.210	ppbv#	79
83) Vinyl Chloride(sim)	3.880	62	17485	0.535	ppbv	98
87) 1, 1, 1-Trichloroethane(...)	7.310	97	9880548	138.133	ppbv#	96
88) Benzene(sim)	7.590	78	69787	0.789	ppbv#	90
89) Carbon Tetrachloride(sim)	7.674	117	3895	0.058	ppbv	93
90) 1, 1-Dichloroethene(sim)	5.226	61	257205	4.528	ppbv	97
93) 1, 1-Dichloroethane(sim)	6.013	63	319098	5.057	ppbv	100
94) Cis-1, 2-Dichloroethene...	6.523	61	10318	0.232	ppbv	95
95) Chloroform(sim)	6.705	83	189206	2.858	ppbv	96
99) Trichloroethene(sim)	8.220	130	1499343	30.263	ppbv	99
105) Tetrachloroethene(sim)	9.950	166	6648044	101.566	ppbv	98
108) m,p-Xylene(sim)	10.627	91	1139017	8.438	ppbv	98
114) 1, 4-Dichlorobenzene(sim)	12.052	146	13002	0.180	ppbv#	79



#7  
**1, 3-Butadiene**  
 Conc: 88 1.651 ppbv  
 RT: 3.971 min Scan# 68  
 Delta R.T. -0.000 min  
 Lab File: 1021\_22.D  
 Acq: 22 Oct 2021 1:53 am

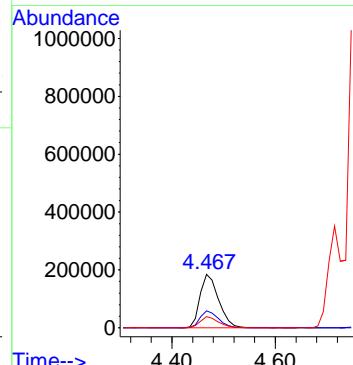
Tgt Ion: 54 Resp: 44802  
 Ion Ratio Lower Upper  
 54 100  
 53 130.5 59.6 89.4#  
 50 124.5 31.9 47.9#

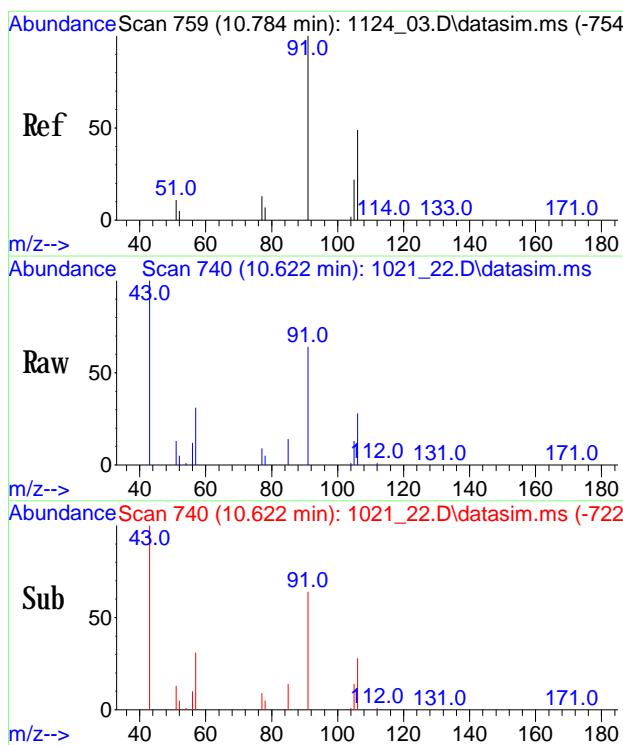
N - out of criteria ratio



#11  
**Ethanol**  
 Conc: 88 31.456 ppbv  
 RT: 4.467 min Scan# 114  
 Delta R.T. 0.022 min  
 Lab File: 1021\_22.D  
 Acq: 22 Oct 2021 1:53 am

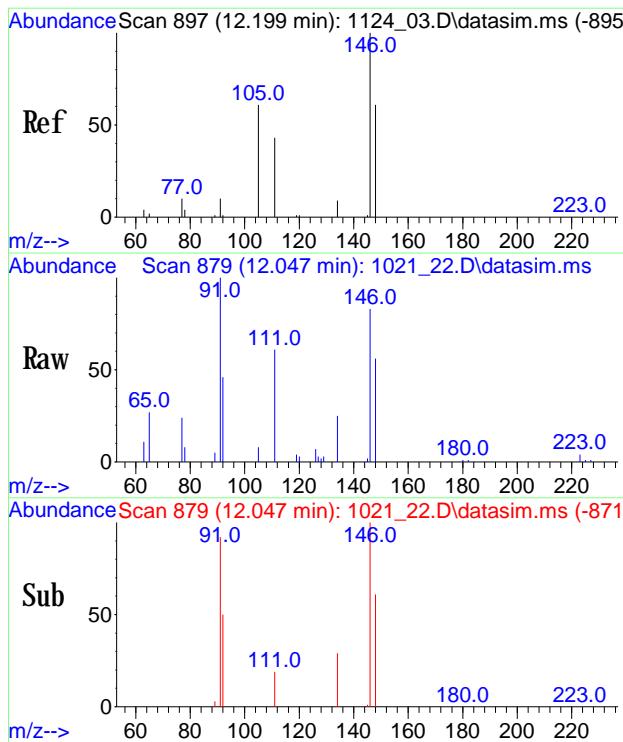
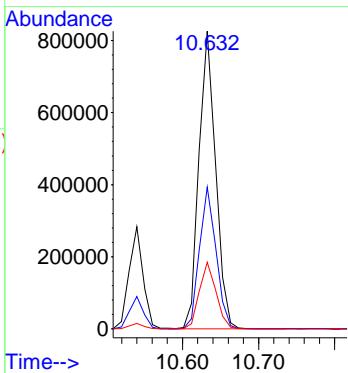
Tgt Ion: 45 Resp: 461961  
 Ion Ratio Lower Upper  
 45 100  
 46 31.7 26.7 40.1  
 43 20.2 16.2 24.2





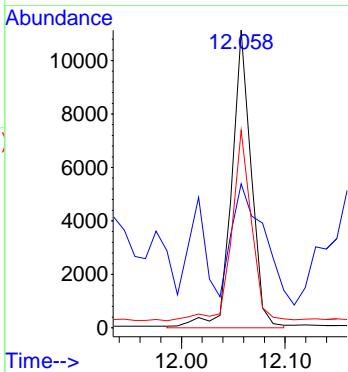
#108  
m p-Xylene(sim)  
Conc: 88 8.438 ppbv  
RT: 10.627 min Scan# 740  
Delta R.T. -0.010 min  
Lab File: 1021\_22.D  
Acq: 22 Oct 2021 1:53 am

Tgt Ion: 91 Resp: 1139017  
Ion Ratio Lower Upper  
91 100  
106 48.7 45.1 55.1  
105 22.7 18.6 27.8



#114  
1, 4-Dichlorobenzene(sim)  
Conc: 88 0.180 ppbv  
RT: 12.052 min Scan# 879  
Delta R.T. -0.010 min  
Lab File: 1021\_22.D  
Acq: 22 Oct 2021 1:53 am

Tgt Ion: 146 Resp: 13002  
Ion Ratio Lower Upper  
146 100  
111 70.4 18.5 58.5#  
148 60.8 42.5 82.5



N - out of criteria ion ratio

1  
AIR ANALYSIS DATA SHEET

**CLIENT ID**

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63028 15X
Canister:	21367	Lab File ID:	1022_11.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200	(cc)	Date Received: 10/21/21 Date Analyzed: 10/22/21
Matrix:	AIR	Dilution Factor:	15

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

This form 1 and the associated quantitation report are filtered for detected compounds in the undiluted analysis.

## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM20\100CT\22\  
 Data File : 1022\_11.D  
 Acq On : 22 Oct 2021 5:00 pm  
 Operator :  
 Client ID : SV-4 15X  
 Lab ID : CJ63028 15X  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 25 08:41:57 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 Last Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.616	130	266036	10.000	ng	-0.01
37) 1, 4-Difluorobenzene	7.780	114	1036668	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	483922	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.622	130	299140	10.000	ng	# 0.00
96) 1, 4-Difluorobenzene(sim)	7.780	114	1036668	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	483922	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.160	95	578217	9.722	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	= 97.20%	
<b>Target Compounds</b>						
3) Dichlorodifluoromethane	3.572	85	29599	0.461	ppbv#	97
6) Vinyl Chloride	3.874	62	5051	0.189	ppbv	100
7) 1, 3-Butadiene	3.971	54	14444	0.539	ppbv#	13
11) Ethanol	4.477	45	143462	9.897	ppbv	99
12) Acetone	4.779	43	1039116	17.524	ppbv	96
16) 1, 1-Dichloroethene	5.217	61	78647	1.483	ppbv	96
20) Carbon Disulfide	5.493	76	48528	0.677	ppbv	95
23) 1, 1-Dichloroethane	6.008	63	83605	1.589	ppbv	98
27) Cis-1, 2-Dichloroethene	6.523	61	2725	0.073	ppbv	92
28) Hexane	6.627	57	83030	1.529	ppbv#	93
29) Chloroform	6.700	83	52681	0.920	ppbv	94
33) 1, 1, 1-Trichloroethane	7.293	97	2768708	45.732	ppbv	98
36) Cyclohexane	7.746	41	13644	0.361	ppbv#	60
40) Trichloroethene	8.214	130	396040	9.966	ppbv	100
44) Heptane	8.370	43	39772	0.464	ppbv#	90
49) Toluene	9.294	91	90446	0.924	ppbv	99
53) Tetrachloroethene	9.944	166	1724310	33.918	ppbv	98
57) Ethylbenzene	10.534	91	95902	0.756	ppbv	99
58) m, p-Xylene	10.627	91	338313	3.548	ppbv	99
62) o-Xylene	10.903	91	150729	1.476	ppbv	99
69) 1, 2, 4-Trimethylbenzene	11.908	105	59158	0.481	ppbv#	85
83) Vinyl Chloride(sim)	3.869	62	5435	0.169	ppbv	96
87) 1, 1, 1-Trichloroethane(...)	7.299	97	3053417	43.454	ppbv#	98
90) 1, 1-Dichloroethene(sim)	5.217	61	78647	1.409	ppbv	95
93) 1, 1-Dichloroethane(sim)	6.013	63	96177	1.551	ppbv	99
94) Cis-1, 2-Dichloroethene...	6.523	61	2725	0.062	ppbv	92
95) Chloroform(sim)	6.695	83	57120	0.878	ppbv#	95
99) Trichloroethene(sim)	8.219	130	449512	9.371	ppbv	99
105) Tetrachloroethene(sim)	9.950	166	2081243	32.839	ppbv	100
108) m, p-Xylene(sim)	10.627	91	340115	3.067	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

1

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63028 30X
Canister:	21367	Lab File ID:	1025_07.D
Instrument:	CHEM24	Column:	RTX-VMS
Purge Volume	200	(cc)	Date Received: 10/21/21
Matrix:	AIR	Date Analyzed: 10/25/21	Dilution Factor: 30

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

This form 1 and the associated quantitation report are filtered for detected compounds in the undiluted analysis.

**Quantitation Report (QT Reviewed)**

Data Path : H:\AIR2021\CHEM24\100CT\25\  
 Data File : 1025\_07.D  
 Acq On : 25 Oct 2021 1:31 pm  
 Operator : Keith  
 Client ID : SV-4 30X  
 Lab ID : CJ63028 30X  
 ALS Vial : 37 Sample Multiplier: 1

Quant Time: Oct 25 15:24:40 2021  
 Quant Method : H:\AIR2021\CHEM24\METHODS\24AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 Last Update : Wed Oct 13 09:11:39 2021  
 Response via : Initial Calibration

Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	5.161	130	361296	10.000	ng	0.00
36) 1, 4-Difluorobenzene	7.121	114	1263365	10.000	ng	0.00
53) Chlorobenzene-d5	10.726	82	640523	10.000	ng	0.00
80) Bromochloromethane(sim)	5.164	130	389429	10.000	ng	# 0.00
95) 1, 4-Difluorobenzene(sim)	7.121	114	1263365	10.000	ng	0.00
105) Chlorobenzene-d5(sim)	10.726	82	640523	10.000	ng	0.00
<b>System Monitoring Compounds</b>						
62) % Bromofluorobenzene	12.200	95	904081	9.988	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	= 99.90%	
<b>Target Compounds</b>						
3) Dichlorodifluoromethane	1.514	85	24038	0.266	ppbv#	97
6) Vinyl Chloride	1.713	62	3402	0.105	ppbv	98
10) Ethanol	2.692	45	58513	4.580	ppbv#	94
12) Acetone	3.273	43	574998	8.638	ppbv	98
16) 1, 1-Dichloroethene	2.589	61	51859	0.847	ppbv	98
20) Carbon Disulfide	2.596	76	39306	0.453	ppbv	95
23) 1, 1-Dichloroethane	4.048	63	60597	0.950	ppbv	99
26) Cis-1, 2-Dichloroethene	4.874	61	3795	0.071	ppbv#	90
27) Hexane	3.485	57	43996	0.793	ppbv#	83
28) Chloroform	5.363	83	44087	0.548	ppbv	88
30) Tetrahydrofuran	5.731	41	27372	0.969	ppbv	96
32) 1, 1, 1-Trichloroethane	5.630	97	2246957	25.959	ppbv	99
34) Carbon Tetrachloride	5.630	117	263292	2.740	ppbv	97
39) Trichloroethene	7.066	130	279158	5.698	ppbv	97
43) Heptane	6.354	43	21760	0.280	ppbv	90
48) Toluene	8.950	91	55970	0.518	ppbv	98
52) Tetrachloroethene	9.426	166	1296430	19.903	ppbv	99
56) Ethylbenzene	10.836	91	68122	0.447	ppbv	98
57) m, p-Xylene	11.021	91	231810	2.000	ppbv	99
61) o-Xylene	11.515	91	101671	0.726	ppbv	92
66) 4-Ethyltoluene	12.544	105	40726	0.238	ppbv#	96
68) 1, 2, 4-Trimethylbenzene	13.135	105	38453	0.266	ppbv#	95
82) Vinyl Chloride(sim)	1.716	62	3497	0.097	ppbv	90
85) 1, 1, 1-Trichloroethane(sim)	5.630	97	2247566	25.668	ppbv#	99
87) Carbon Tetrachloride(sim)	5.630	117	272379	2.817	ppbv	97
88) 1, 1-Dichloroethene(sim)	2.592	61	58372	0.881	ppbv	98
91) 1, 1-Dichloroethane(sim)	4.048	63	60554	0.913	ppbv	99
92) Cis-1, 2-Dichloroethene...	4.862	61	3250	0.056	ppbv	96
93) Chloroform(sim)	5.363	83	44087	0.532	ppbv	88
98) Trichloroethene(sim)	7.069	130	305657	6.270	ppbv	99
104) Tetrachloroethene(sim)	9.429	166	1413478	21.481	ppbv	99
108) Ethylbenzene(sim)	10.839	91	74109	0.455	ppb	99
109) m, p-Xylene(sim)	11.021	91	231810	1.964	ppbv	99
110) o-Xylene(sim)	11.518	91	111561	0.710	ppb #	91

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

SV-5 5X	
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Client: GZA-NY Lab: Phoenix Env. Labs

SDG No.: GCJ63027 Lab Sample ID: CJ63029 5X

Canister: 19635 Lab File ID: 1021\_23.D

Instrument: CHEM20 Column: RTX-1 60M Date Received: 10/21/21

Purge Volume 200 (cc) Date Analyzed: 10/22/21 

Matrix: AIR Dilution Factor: 5

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	2.91	U	2.91	2.91	r
75-71-8	Dichlorodifluoromethane	1.01	U	1.01	1.01	r
74-87-3	Chloromethane	2.42	U	2.42	2.42	r
75-01-4	Vinyl Chloride	330	E	0.390	0.390	
106-99-0	1,3-Butadiene 	16.8		2.26	2.26	r
75-00-3	Chloroethane	66.5 		1.90	1.90	r
64-17-5	Ethanol 	206	ES	2.66	2.66	r
67-64-1	Acetone	773	ES	2.11	2.11	
67-63-0	Isopropylalcohol 	11.0	S	2.04	2.04	r
107-13-1	Acrylonitrile	2.31	U	2.31	2.31	r
75-35-4	1,1-Dichloroethene	1450	E	0.252	0.252	
75-09-2	Methylene Chloride	8.00	S	4.32	4.32	r
75-15-0	Carbon Disulfide	2.51		1.61	1.61	r
156-60-5	Trans-1,2-Dichloroethene	256	E	1.26	1.26	
75-34-3	1,1-Dichloroethane	2350	E	1.24	1.24	
1634-04-4	Methyl tert-butyl ether(MTBE)	1.39	U	1.39	1.39	r
78-93-3	Methyl Ethyl Ketone	41.6		1.70	1.70	r
156-59-2	Cis-1,2-Dichloroethene	2610	E	0.252	0.252	
110-54-3	Hexane	20.4	S	1.42	1.42	r
67-66-3	Chloroform	50.7		1.02	1.02	r
141-78-6	Ethyl acetate	1.39	U	1.39	1.39	r
109-99-9	Tetrahydrofuran	52.3		1.70	1.70	r
71-55-6	1,1,1-Trichloroethane	2690	E	0.917	0.917	
71-43-2	Benzene	30.7		1.57	1.57	r
110-82-7	Cyclohexane	62.8		1.45	1.45	r
79-01-6	Trichloroethene	3140	E	0.185	0.185	
142-82-5	Heptane	11.6		1.22	1.22	r
108-10-1	4-Methyl-2-pentanone(MIBK)	1.22	U	1.22	1.22	r
10061-02-6	trans-1,3-Dichloropropene	1.10	U	1.10	1.10	r
108-88-3	Toluene	29.3		1.33	1.33	r
591-78-6	2-Hexanone(MBK)	1.22	U	1.22	1.22	r
127-18-4	Tetrachloroethene	427	E	0.184	0.184	
630-20-6	1,1,1,2-Tetrachloroethane	0.729	U	0.729	0.729	r
108-90-7	Chlorobenzene	1.09	U	1.09	1.09	r
100-41-4	Ethylbenzene	8.40		1.15	1.15	r
179601-23-1	m,p-Xylene	32.5		1.15	1.15	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

### CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	UV 3.5X
SDG No.:	GCJ63027	Lab Sample ID:	CJ63029 5X	
Canister:	19635	Lab File ID:	1021_23.D	
Instrument:	CHEM20	Column:	RTX-1 60M	Date Received: 10/21/21
Purge Volume	200	(cc)	Date Analyzed: 10/22/21	
Matrix:	AIR	Dilution Factor:	5	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

**Quantitation Report (QT Reviewed)**

Data Path : H:\AIR2021\CHEM20\100CT\20A\  
 Data File : 1021\_23.D  
 Acq On : 22 Oct 2021 2:29 am  
 Operator :  
 Client ID : SV-5 5X  
 Lab ID : CJ63029 5X  
 ALS Vial : 54 Sample Multiplier: 1

Quant Time: Oct 22 09:38:48 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 Last Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.637	130	296112	10.000	ng	0.01
37) 1, 4-Difluorobenzene	7.791	114	1164978	10.000	ng	0.00
54) Chlorobenzene-d5	10.309	82	552574	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.643	130	333676	10.000	ng	# 0.01
96) 1, 4-Difluorobenzene(sim)	7.791	114	1164978	10.000	ng	0.00
106) Chlorobenzene-d5(sim)	10.309	82	552574	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.160	95	701915	10.336	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	= 103.40%	
<b>Target Compounds</b>						
6) Vinyl Chloride	3.863	62	1956586	65.945	ppbv	100
7) 1,3-Butadiene	3.939	54	100082	3.356	ppbv#	1
9) Chloroethane	4.284	64	179049	13.302	ppbv	95
11) Ethanol	4.445	45	664644	41.193	ppbv	99
12) Acetone	4.747	43	10197604	154.510	ppbv	96
13) Trichlorofluoromethane	4.812	101	16183	0.210	ppbv	95
14) Isopropyl alcohol	5.016	45	193307	2.192	ppbv#	1
16) 1,1-Dichloroethene	5.234	61	17168924	290.956	ppbv	94
17) Methylene Chloride	5.312	49	92008	1.599	ppbv	91
20) Carbon Disulfide	5.493	76	40110	0.502	ppbv	96
22) Trans-1,2-Dichloroethene	5.897	61	2684868	51.171	ppbv	96
23) 1,1-Dichloroethane	6.008	63	27489056m	469.342	ppbv	0
26) Methyl Ethyl Ketone	6.331	43	788114	8.315	ppbv#	68
27) Cis-1,2-Dichloroethene	6.523	61	21551220	521.849	ppbv#	54
28) Hexane	6.648	57	246257	4.074	ppbv#	67
29) Chloroform	6.710	83	645746	10.132	ppbv	96
31) Tetrahydrofuran	7.033	42	568408	10.461	ppbv	93
33) 1,1,1-Trichloroethane	7.304	97	36187210m	537.005	ppbv	0
34) Benzene	7.601	78	549733	6.135	ppbv#	91
36) Cyclohexane	7.757	41	527794	12.556	ppbv	94
40) Trichloroethene	8.225	130	28027247	627.613	ppbv#	88
44) Heptane	8.381	43	224256	2.329	ppbv#	94
49) Toluene	9.304	91	645815	5.869	ppbv	100
53) Tetrachloroethene	9.954	166	4876900	85.366	ppbv	97
57) Ethylbenzene	10.534	91	243070	1.679	ppbv	99
58) m,p-Xylene	10.627	91	707024	6.493	ppbv	98
62) o-Xylene	10.903	91	297546	2.552	ppbv	99
65) Isopropylbenzene	11.231	105	46764	0.294	ppbv	97
67) 4-Ethyltoluene	11.590	105	355390	2.237	ppbv	99
68) 1,3,5-Trimethylbenzene	11.652	105	108800	0.778	ppbv#	95
69) 1,2,4-Trimethylbenzene	11.908	105	353350	2.514	ppbv#	85
77) n-Butylbenzene	12.432	91	32395	0.212	ppbv#	39
83) Vinyl Chloride(sim)	3.858	62	2180142	60.824	ppbv	100
85) Trichlorofluoromethane(...)	4.817	101	16675	0.185	ppbv#	99
87) 1,1,1-Trichloroethane(...)	7.310	97	34564813m	440.987	ppbv	0
88) Benzene(sim)	7.601	78	547000	5.642	ppbv#	90
90) 1,1-Dichloroethene(sim)	5.234	61	17168924	275.846	ppbv	99
92) Trans-1,2-Dichloroethene(...)	5.897	61	2684868	46.867	ppbv	96
93) 1,1-Dichloroethane(sim)	6.013	63	28065940m	405.887	ppbv	53
94) Cis-1,2-Dichloroethene(...)	6.523	61	21495801	440.532	ppbv#	55
95) Chloroform(sim)	6.716	83	693092	9.553	ppbv	96
99) Trichloroethene(sim)	8.231	130	28586530	530.286	ppbv	97

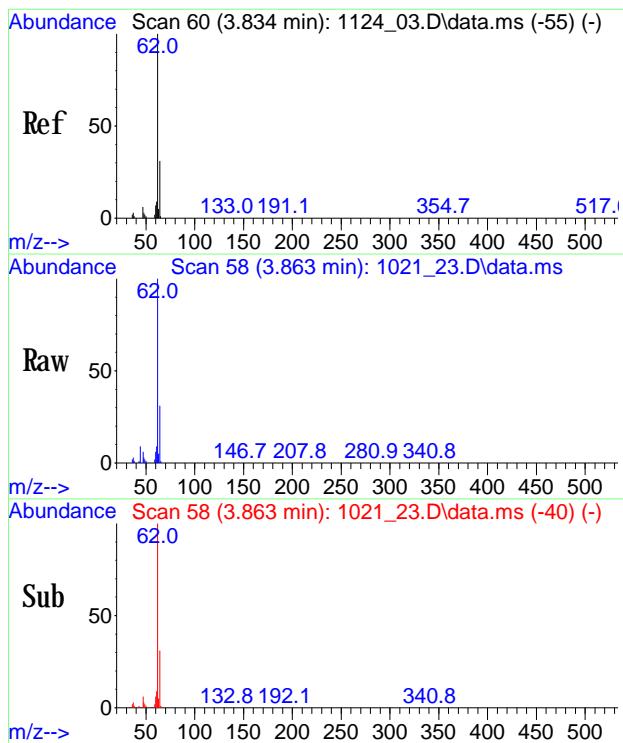
## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM20\100CT\20A\  
Data File : 1021\_23.D  
Acq On : 22 Oct 2021 2:29 am  
Operator :  
Client ID : SV-5 5X  
Lab ID : CJ63029 5X  
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Oct 22 09:38:48 2021  
Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
Quant Title : VOA Standards for 5 point calibration  
QLast Update : Wed Oct 13 11:26:15 2021  
Response via : Initial Calibration

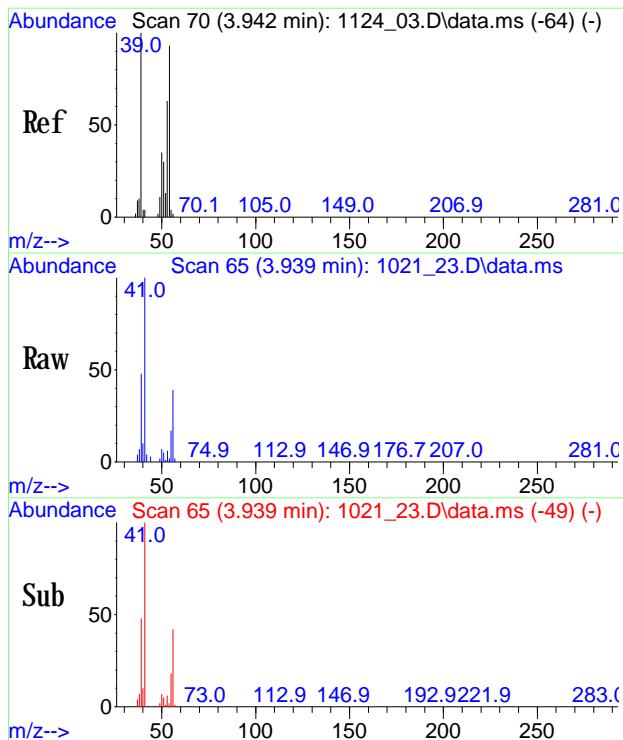
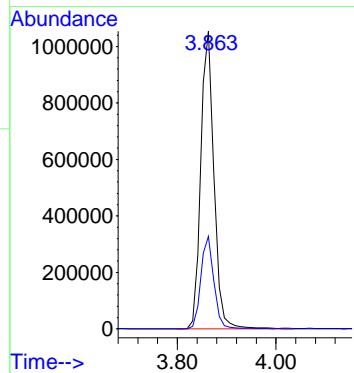
Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
105] Tetrachloroethene(sim)	9.960	166	5725070	80.384	ppbv	99
108] m,p-Xylene(sim)	10.627	91	709098	5.599	ppbv	98

(#)out of range (m)manual integration reviewed by analyst (+)signals summed



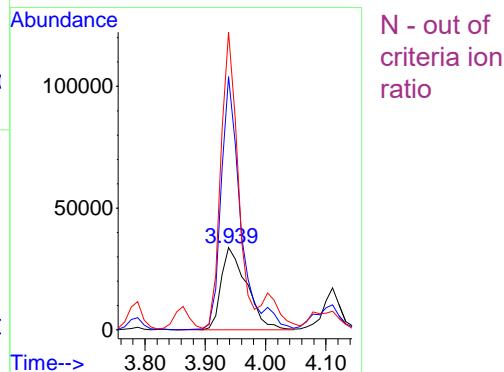
#6  
**Vinyl Chloride**  
 Conc: 8S 65.945 ppbv  
 RT: 3.863 min Scan# 58  
 Delta R.T. -0.011 min  
 Lab File: 1021\_23.D  
 Acq: 22 Oct 2021 2:29 am

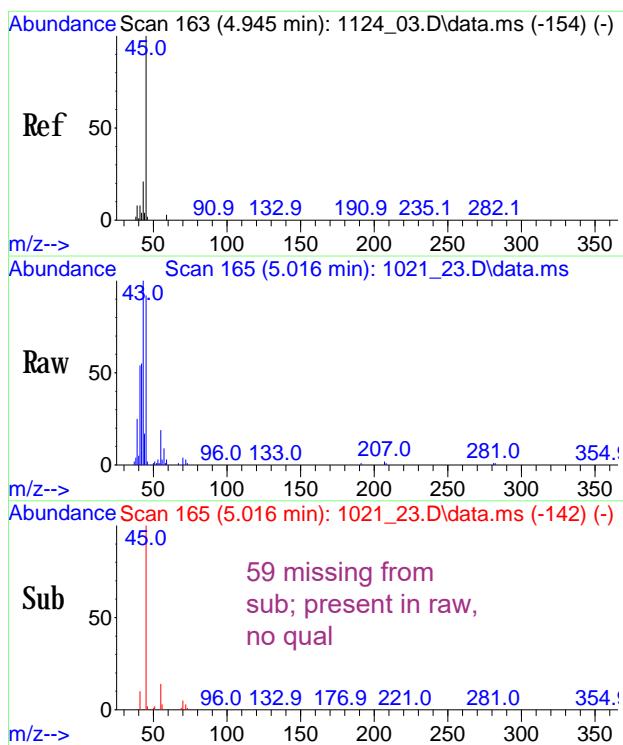
Tgt Ion: 62 Resp: 1956586  
 Ion Ratio Lower Upper  
 62 100  
 64 30.8 10.8 50.8



#7  
**1,3-Butadiene**  
 Conc: 8S 3.356 ppbv  
 RT: 3.939 min Scan# 65  
 Delta R.T. -0.032 min  
 Lab File: 1021\_23.D  
 Acq: 22 Oct 2021 2:29 am

Tgt Ion: 54 Resp: 100082  
 Ion Ratio Lower Upper  
 54 100  
 53 235.3 59.6 89.4#  
 50 239.0 31.9 47.9#

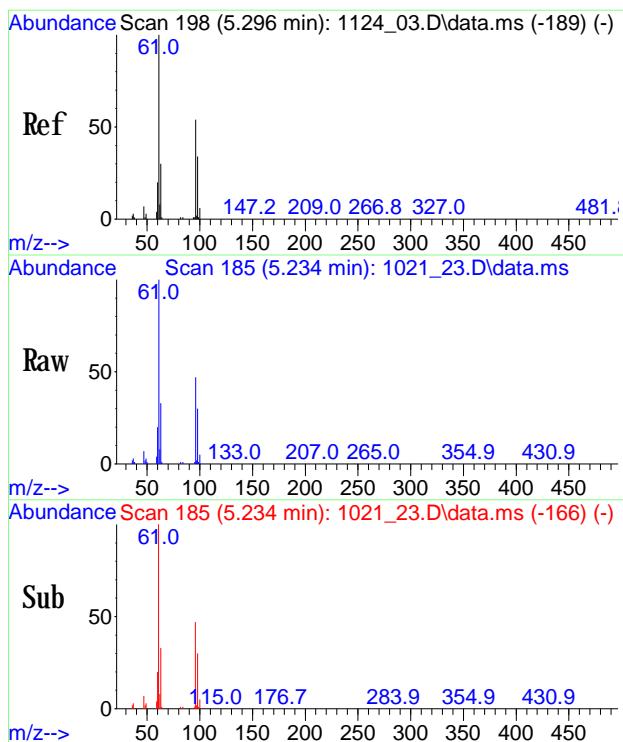
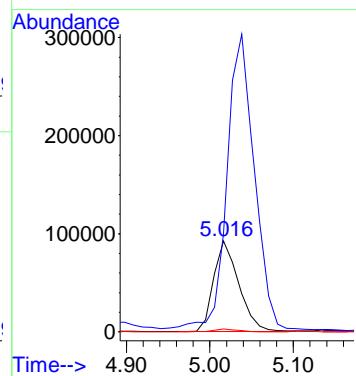




#14  
Isopropyl alcohol  
Conc: 8\\$ 2,192 ppbv  
RT: 5.016 min Scan# 165  
Delta R.T. 0.043 min  
Lab File: 1021\_23.D  
Acq: 22 Oct 2021 2:29 am

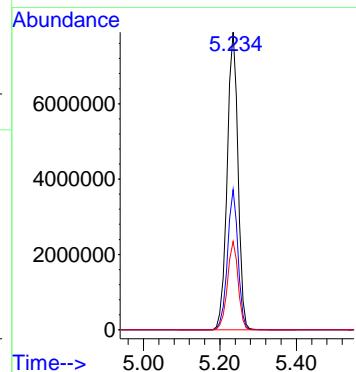
Tgt Ion: 45 Resp: 193307  
Ion Ratio Lower Upper  
45 100  
43 351.8 13.1 19.7#  
59 3.2 2.4 3.6

N - out of criteria ion ratio



#16  
1,1-Dichloroethene  
Conc: 8\\$ 290.956 ppbv  
RT: 5.234 min Scan# 185  
Delta R.T. 0.009 min  
Lab File: 1021\_23.D  
Acq: 22 Oct 2021 2:29 am

Tgt Ion: 61 Resp: 17168924  
Ion Ratio Lower Upper  
61 100  
96 45.4 41.3 61.9  
98 28.9 23.0 34.4



1  
AIR ANALYSIS DATA SHEET

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63029 160X
Canister:	19635	Lab File ID:	1022_12.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200	(cc)	Date Received: 10/21/21
Matrix:	AIR	Date Analyzed: 10/22/21	✓
		Dilution Factor:	160

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
75-01-4	Vinyl Chloride	295	O	D	12.5	12.5
106-99-0	1,3-Butadiene	72.4	U	72.4	72.4	
75-00-3	Chloroethane	63.2	X	60.7	60.7	
64-17-5	Ethanol	85.0	U	85.0	85.0	
67-64-1	Acetone	677	DS	67.4	67.4	r
67-63-0	Isopropylalcohol	65.1	U	65.1	65.1	
75-35-4	1,1-Dichloroethene	1180	D	8.08	8.08	r
75-09-2	Methylene Chloride	138	U	138	138	
75-15-0	Carbon Disulfide	51.4	U	51.4	51.4	
156-60-5	Trans-1,2-Dichloroethene	216	D	40.4	40.4	r
75-34-3	1,1-Dichloroethane	6270	D	39.6	39.6	r
78-93-3	Methyl Ethyl Ketone	54.3	U	54.3	54.3	
156-59-2	Cis-1,2-Dichloroethene	4700	D	8.08	8.08	r
110-54-3	Hexane	45.4	U	45.4	45.4	
67-66-3	Chloroform	41.2	X	32.8	32.8	
109-99-9	Tetrahydrofuran	54.3	U	54.3	54.3	
71-55-6	1,1,1-Trichloroethane	9980	E	29.3	29.3	
110-82-7	Cyclohexane	46.5	U	46.5	46.5	
79-01-6	Trichloroethene	7640	E	5.92	5.92	
142-82-5	Heptane	39.1	U	39.1	39.1	
108-88-3	Toluene	42.5	U	42.5	42.5	
127-18-4	Tetrachloroethene	375	D	5.90	5.90	r
100-41-4	Ethylbenzene	36.9	U	36.9	36.9	
95-47-6	o-Xylene	36.9	U	36.9	36.9	
98-82-8	Isopropylbenzene	32.6	U	32.6	32.6	
622-96-8	4-Ethyltoluene	32.6	U	32.6	32.6	
108-67-8	1,3,5-Trimethylbenzene	32.6	U	32.6	32.6	
95-63-6	1,2,4-Trimethylbenzene	32.6	U	32.6	32.6	
75-69-4	Trichlorofluoromethane(sim)	28.5	U	28.5	28.5	
71-43-2	Benzene(sim)	50.1	U	50.1	50.1	
179601-23-1	m,p-Xylene(sim)	36.9	U	36.9	36.9	
104-51-8	n-Butylbenzene(sim)	29.2	U	29.2	29.2	

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

This form 1 and the associated quantitation report are filtered for detected compounds in the undiluted analysis.

## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM20\100CT\22\  
 Data File : 1022\_12.D  
 Acq On : 22 Oct 2021 5:36 pm  
 Operator :  
 Client ID : SV-5 160X  
 Lab ID : CJ63029 160X  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 25 08:54:23 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 QLast Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.627	130	264758	10.000	ng	0.00
37) 1, 4-Difluorobenzene	7.779	114	1055536	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	455695	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.632	130	299126	10.000	ng	# 0.00
96) 1, 4-Difluorobenzene(sim)	7.779	114	1055131	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	455695	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.159	95	549336	9.809	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	=	98.10%
<b>Target Compounds</b>						
6) Vinyl Chloride	3.863	62	48922	1.844	ppbv	98
9) Chloroethane	4.294	64	4754	0.395	ppbv	96
12) Acetone	4.822	43	249703m	4.231	ppbv	49
16) 1, 1-Dichloroethene	5.225	61	389323	7.379	ppbv	96
22) Trans-1, 2-Dichloroethene	5.882	61	63266	1.349	ppbv	96
23) 1, 1-Dichloroethane	6.008	63	2050862	39.163	ppbv	99
27) Cis-1, 2-Dichloroethene	6.523	61	1084440	29.369	ppbv	93
29) Chloroform	6.700	83	14656	0.257	ppbv	91
33) 1, 1, 1-Trichloroethane	7.304	97	3759162	62.391	ppbv	98
36) Cyclohexane	7.746	41	10903	0.290	ppbv#	70
40) Trichloroethene	8.214	130	1932974	47.773	ppbv	100
53) Tetrachloroethene	9.944	166	121255	2.343	ppbv	99
83) Vinyl Chloride(sim)	3.869	62	54030	1.681	ppbv	100
87) 1, 1, 1-Trichloroethane(...)	7.309	97	4129718	58.774	ppbv#	98
90) 1, 1-Dichloroethene(sim)	5.225	61	389323	6.978	ppbv	97
92) Trans-1, 2-Dichloroethene(...)	5.882	61	63266	1.232	ppbv	96
93) 1, 1-Dichloroethane(sim)	6.013	63	2319248	37.415	ppbv	99
94) Cis-1, 2-Dichloroethene(...)	6.523	61	1079755	24.684	ppbv	93
95) Chloroform(sim)	6.705	83	15861	0.244	ppbv#	92
99) Trichloroethene(sim)	8.219	130	2159211	44.224	ppbv	99
105) Tetrachloroethene(sim)	9.950	166	146178	2.266	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

1  
AIR ANALYSIS DATA SHEET

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63029 800X
Canister:	19635	Lab File ID:	1022_13.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200	(cc)	Date Received: 10/21/21
Matrix:	AIR	Date Analyzed: 10/22/21	Dilution Factor: 800

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R	
75-01-4	Vinyl Chloride	278	X	62.4	62.4		
106-99-0	1,3-Butadiene	362	U	362	362		
75-00-3	Chloroethane	303	U	303	303		
64-17-5	Ethanol	425	U	425	425		
67-64-1	Acetone	337	U	337	337		
67-63-0	Isopropylalcohol	326	U	326	326		
75-35-4	1,1-Dichloroethene	1120	X	40.4	40.4		
75-09-2	Methylene Chloride	690	U	690	690		
75-15-0	Carbon Disulfide	257	U	257	257		
156-60-5	Trans-1,2-Dichloroethene	213	X	202	202		
75-34-3	1,1-Dichloroethane	6070	X	198	198		
78-93-3	Methyl Ethyl Ketone	271	U	271	271		
156-59-2	Cis-1,2-Dichloroethene	3900	X	40.4	40.4		
110-54-3	Hexane	227	U	227	227		
109-99-9	Tetrahydrofuran	271	U	271	271		
71-55-6	1,1,1-Trichloroethane	9570	D	147	147	r	
110-82-7	Cyclohexane	233	U	233	233		
79-01-6	Trichloroethene	7360	○	D	29.8	29.8	r
142-82-5	Heptane	195	U	195	195		
108-88-3	Toluene	212	U	212	212		
127-18-4	Tetrachloroethene	363	X	29.5	29.5		
100-41-4	Ethylbenzene	184	U	184	184		
95-47-6	o-Xylene	184	U	184	184		
98-82-8	Isopropylbenzene	163	U	163	163		
622-96-8	4-Ethyltoluene	163	U	163	163		
108-67-8	1,3,5-Trimethylbenzene	163	U	163	163		
95-63-6	1,2,4-Trimethylbenzene	163	U	163	163		
75-69-4	Trichlorofluoromethane(sim)	142	U	142	142		
71-43-2	Benzene(sim)	251	U	251	251		
67-66-3	Chloroform(sim)	164	U	164	164		
179601-23-1	m,p-Xylene(sim)	184	U	184	184		
104-51-8	n-Butylbenzene(sim)	146	U	146	146		

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

This form 1 and the associated quantitation report are filtered for detected compounds in the undiluted analysis.

## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM20\100CT\22\  
 Data File : 1022\_13.D  
 Acq On : 22 Oct 2021 6:11 pm  
 Operator :  
 Client ID : SV-5 800X  
 Lab ID : CJ63029 800X  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 25 08:42:12 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 QLast Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.616	130	263954	10.000	ng	-0.01
37) 1, 4-Difluorobenzene	7.779	114	1032461	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	454102	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.622	130	300286	10.000	ng	#-0.01
96) 1, 4-Difluorobenzene(sim)	7.779	114	1031348	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	454102	10.000	ng	#-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.159	95	537301	9.627	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	=	96.30%
<b>Target Compounds</b>						
6) Vinyl Chloride	3.874	62	9197	0.348	ppbv	95
16) 1, 1-Dichloroethene	5.217	61	73611	1.399	ppbv	95
22) Trans-1, 2-Dichloroethene	5.882	61	12456	0.266	ppbv	95
23) 1, 1-Dichloroethane	6.008	63	396057	7.586	ppbv	100
27) Cis-1, 2-Dichloroethene	6.523	61	179674	4.881	ppbv	94
33) 1, 1, 1-Trichloroethane	7.293	97	718253	11.957	ppbv	99
40) Trichloroethene	8.214	130	363927	9.195	ppbv	99
53) Tetrachloroethene	9.944	166	22970	0.454	ppbv	96
83) Vinyl Chloride(sim)	3.869	62	10325	0.320	ppbv	99
87) 1, 1, 1-Trichloroethane(...)	7.299	97	792278	11.232	ppbv#	99
90) 1, 1-Dichloroethene(sim)	5.217	61	73611	1.314	ppbv	98
93) 1, 1-Dichloroethane(sim)	6.013	63	447116	7.185	ppbv	99
94) Cis-1, 2-Dichloroethene(...)	6.523	61	180189	4.103	ppbv	94
99) Trichloroethene(sim)	8.219	130	418288	8.765	ppbv	99
105) Tetrachloroethene(sim)	9.950	166	27686	0.439	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

IA-2	
------	---

Client: GZA-NY Lab: Phoenix Env. Labs

SDG No.: GCJ63027 Lab Sample ID: CJ63030

Canister: 13650 Lab File ID: 1022\_07.D

Instrument: CHEM20 Column: RTX-1 60M Date Received: 10/21/21

Purge Volume 200 (cc) Date Analyzed: 10/22/21

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	4.24		0.202	0.202	r
74-87-3	Chloromethane	8.17		0.485	0.485	r
106-99-0	1,3-Butadiene N	3.12		0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol J	311	ES	0.531	0.531	r
67-64-1	Acetone J	33.4	S	0.421	0.421	r
75-69-4	Trichlorofluoromethane	0.370		0.178	0.178	r
67-63-0	Isopropylalcohol	25.7	S	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	1.49	S	0.864	0.864	r
75-15-0	Carbon Disulfide	0.359		0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	7.16		0.339	0.339	r
110-54-3	Hexane	5.23	S	0.284	0.284	r
67-66-3	Chloroform	0.395		0.205	0.205	r
141-78-6	Ethyl acetate	2.29		0.278	0.278	r
109-99-9	Tetrahydrofuran J	0.761 O		0.339	0.339	r
71-43-2	Benzene	6.75		0.313	0.313	r
110-82-7	Cyclohexane	2.32		0.291	0.291	r
142-82-5	Heptane N	3.86 O		0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.221	U	0.221	0.221	r
108-88-3	Toluene	14.0		0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
127-18-4	Tetrachloroethene	0.433		0.037	0.037	r
630-20-6	1,1,1,2-Tetrachloroethane	0.146	U	0.146	0.146	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene	2.56		0.230	0.230	r
179601-23-1	m,p-Xylene	10.5		0.230	0.230	r
100-42-5	Styrene	1.46		0.235	0.235	r
95-47-6	o-Xylene	3.38		0.230	0.230	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	1.46		0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.629		0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	1.95		0.204	0.204	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Client:	<u>GZA-NY</u>	Lab:	<u>Phoenix Env. Labs</u>	IA 2
SDG No.:	<u>GCJ63027</u>	Lab Sample ID:	<u>CJ63030</u>	
Canister:	<u>13650</u>	Lab File ID:	<u>1022_07.D</u>	
Instrument:	<u>CHEM20</u>	Column:	<u>RTX-1 60M</u>	Date Received: <u>10/21/21</u>
Purge Volume	<u>200</u>	(cc)	Date Analyzed:	<u>10/22/21</u>
Matrix:	<u>AIR</u>	Dilution Factor:	<u>1</u>	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM I AIR

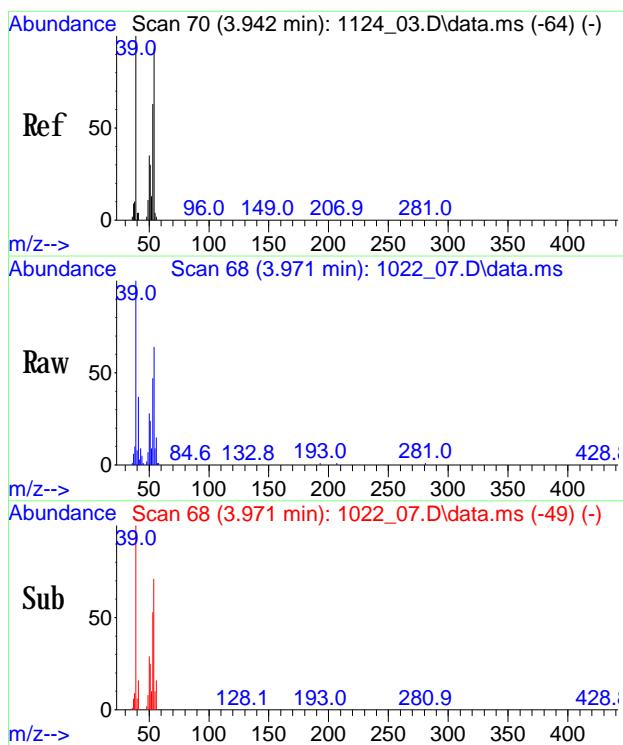
r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM20\100CT\22\  
 Data File : 1022\_07.D  
 Acq On : 22 Oct 2021 2:28 pm  
 Operator :  
 Client ID : IA-2  
 Lab ID : CJ63030  
 ALS Vial : 7 Sample Multiplier: 1

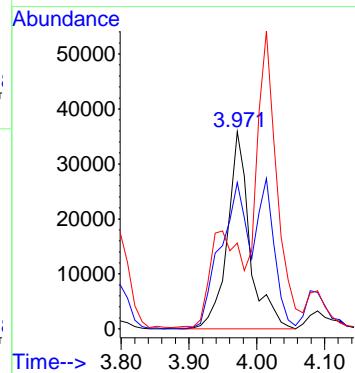
Quant Time: Oct 25 08:51:58 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 Last Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.617	130	263553	10.000	ng	-0.01
37) 1, 4-Difluorobenzene	7.780	114	1041012	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	475781	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.622	130	298503	10.000	ng	# 0.00
96) 1, 4-Difluorobenzene(sim)	7.780	114	1041012	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	475781	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.160	95	587799	10.052	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	= 100.50%	
<b>Target Compounds</b>						
3) Dichlorodifluoromethane	3.583	85	269708	4.244	ppbv	97
4) Chloromethane	3.701	50	271036	8.167	ppbv	97
7) 1, 3-Butadiene	3.971	54	82696	3.116	ppbv#	72
11) Ethanol	4.424	45	4468306	311.145	ppbv	98
12) Acetone	4.725	43	1959853m	33.363	ppbv	74
13) Trichlorofluoromethane	4.812	101	25411	0.370	ppbv	98
14) Isopropyl alcohol	4.973	45	2018923	25.723	ppbv	99
17) Methylene Chloride	5.295	49	76056	1.485	ppbv	89
20) Carbon Disulfide	5.493	76	25521	0.359	ppbv	98
26) Methyl Ethyl Ketone	6.284	43	603930	7.159	ppbv	96
28) Hexane	6.637	57	281586	5.234	ppbv	85
29) Chloroform	6.700	83	22430	0.395	ppbv	89
30) Ethyl acetate	6.679	61	25694	2.292	ppbv	97
31) Tetrahydrofuran	7.012	42	36819m	0.761	ppbv	79
34) Benzene	7.579	78	538148	6.748	ppbv	94
35) Carbon Tetrachloride	7.679	117	5942	0.096	ppbv	98
36) Cyclohexane	7.746	41	86667	2.316	ppbv	97
39) Bromodichloromethane	8.181	83	8835	0.147	ppbv#	28
40) Trichloroethene	8.214	130	6255	0.157	ppbv#	92
44) Heptane	8.370	43	331793	3.856	ppbv#	71
49) Toluene	9.294	91	1381010	14.045	ppbv	100
53) Tetrachloroethene	9.944	166	22100	0.433	ppbv	94
57) Ethyl benzene	10.534	91	319405	2.563	ppbv	99
58) m,p-Xylene	10.627	91	985256	10.508	ppbv	99
60) Styrene	10.842	104	99138	1.460	ppbv#	93
62) o-Xylene	10.903	91	339016	3.377	ppbv	100
67) 4-Ethyl tol uene	11.590	105	199847	1.461	ppbv#	95
68) 1, 3, 5-Trimethylbenzene	11.652	105	75765	0.629	ppbv	99
69) 1, 2, 4-Trimethylbenzene	11.908	105	235987	1.950	ppbv#	89
73) 1, 4-Dichlorobenzene	12.052	146	1030321	18.086	ppbv	98
75) 4-Isopropyltoluene	12.165	119	74338	0.439	ppbv#	81
77) n-Butylbenzene	12.432	91	28517	0.216	ppbv#	67
85) Trichlorofluoromethane...	4.817	101	25627	0.318	ppbv#	100
88) Benzene(sim)	7.579	78	535073	6.170	ppbv	94
89) Carbon Tetrachloride(sim)	7.674	117	6381	0.096	ppbv	99
95) Chloroform(sim)	6.705	83	23869	0.368	ppbv#	92
99) Trichloroethene(sim)	8.220	130	6788	0.141	ppbv	98
105) Tetrachloroethene(sim)	9.950	166	27184	0.427	ppbv	99
108) m,p-Xylene(sim)	10.627	91	990013	9.079	ppbv	99
114) 1, 4-Dichlorobenzene(sim)	12.052	146	1030364	17.635	ppbv	98
116) 4-Isopropyltoluene(sim)	12.165	119	72937	0.373	ppbv#	80
118) n-Butylbenzene(sim)	12.432	91	28709	0.213	ppbv#	68

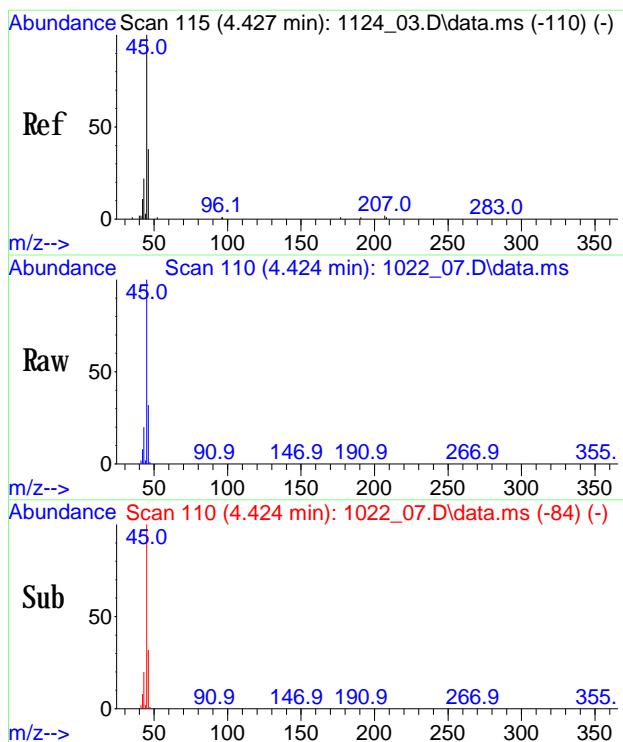


#7  
**1, 3-Butadiene**  
 Conc: 8\\$ 3.116 ppbv  
 RT: 3.971 min Scan# 68  
 Delta R.T. -0.000 min  
 Lab File: 1022\_07.D  
 Acq: 22 Oct 2021 2:28 pm

Tgt Ion: 54 Resp: 82696  
 Ion Ratio Lower Upper  
 54 100  
 53 91.1 59.6 89.4#  
 50 66.2 31.9 47.9#

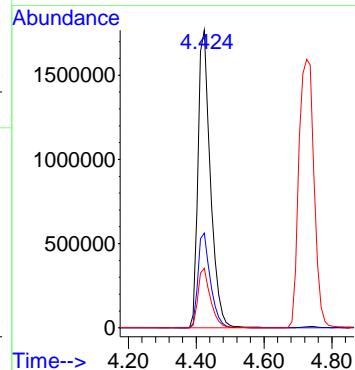


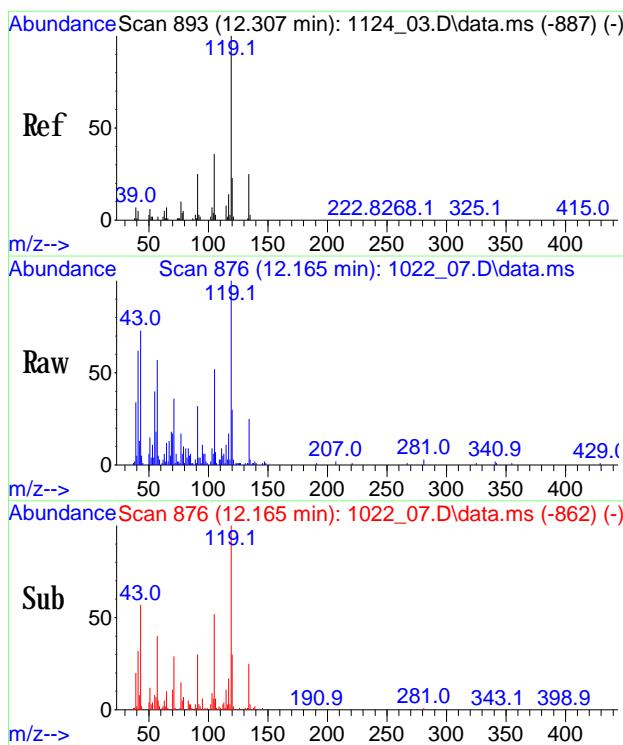
N - out of criteria ion ratios and poor chromatographic separation



#11  
**Ethanol**  
 Conc: 8\\$ 311.145 ppbv  
 RT: 4.424 min Scan# 110  
 Delta R.T. -0.021 min  
 Lab File: 1022\_07.D  
 Acq: 22 Oct 2021 2:28 pm

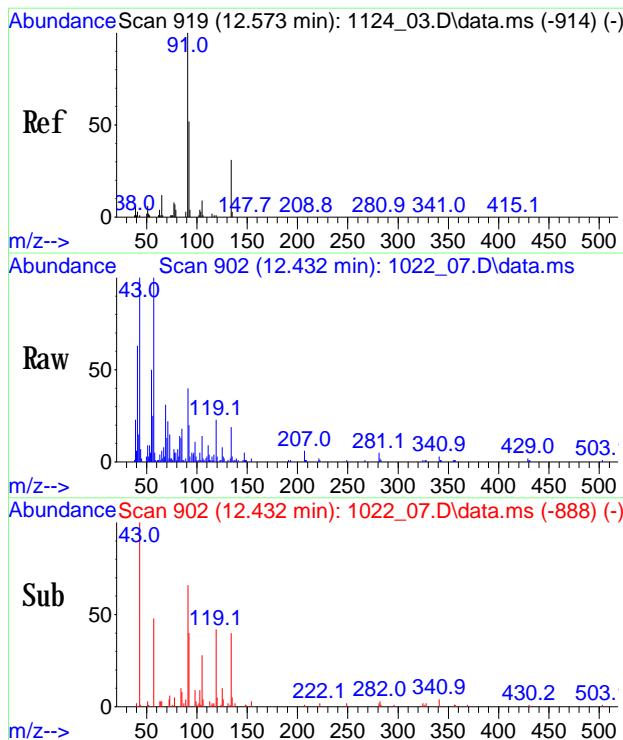
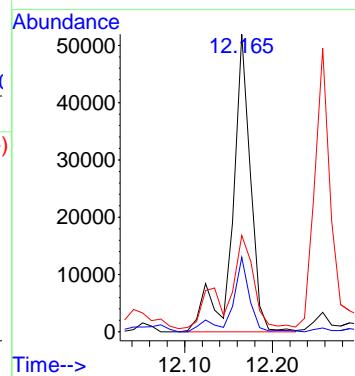
Tgt Ion: 45 Resp: 4468306  
 Ion Ratio Lower Upper  
 45 100  
 46 31.9 26.7 40.1  
 43 19.9 16.2 24.2





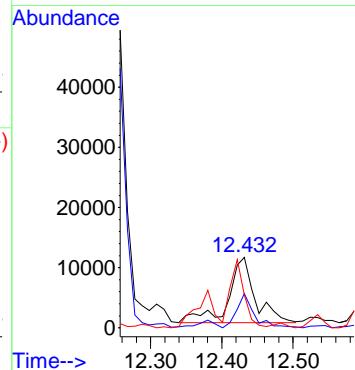
#75  
4-Isopropyltoluene  
Conc: 8S 0.439 ppbv  
RT: 12.165 min Scan# 876  
Delta R.T. -0.010 min  
Lab File: 1022\_07.D  
Acq: 22 Oct 2021 2:28 pm

Tgt Ion: 119 Resp: 74338  
Ion Ratio Lower Upper  
119 100  
134 24.0 19.2 28.8  
91 46.4 22.5 33.7#



#77  
n-Butylbenzene  
Conc: 8S 0.216 ppbv  
RT: 12.432 min Scan# 902  
Delta R.T. -0.010 min  
Lab File: 1022\_07.D  
Acq: 22 Oct 2021 2:28 pm

Tgt Ion: 91 Resp: 28517  
Ion Ratio Lower Upper  
91 100  
92 33.9 38.7 58.1#  
134 55.1 21.8 32.6#



N - out of criteria  
ion ratio

## AIR ANALYSIS DATA SHEET

1

CLIENT ID

SV-6 5X

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63031 5X
Canister:	12858	Lab File ID:	1021_25.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200 (cc)	Date Received:	10/21/21
Matrix:	AIR	Date Analyzed:	10/22/21
Dilution Factor:	5		

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	38.5		2.91	2.91	r
75-71-8	Dichlorodifluoromethane	1.01	U	1.01	1.01	r
74-87-3	Chloromethane	2.42	U	2.42	2.42	r
106-99-0	1,3-Butadiene N	9.69		2.26	2.26	r
75-00-3	Chloroethane	1.90	U	1.90	1.90	r
64-17-5	Ethanol	117	S	2.66	2.66	r
67-64-1	Acetone	564	ES	2.11	2.11	
75-69-4	Trichlorofluoromethane	1.10		0.891	0.891	r
67-63-0	Isopropylalcohol	2.04	U	2.04	2.04	r
107-13-1	Acrylonitrile	2.31	U	2.31	2.31	r
75-09-2	Methylene Chloride	4.32	U	4.32	4.32	r
75-15-0	Carbon Disulfide	5.52		1.61	1.61	r
75-34-3	1,1-Dichloroethane	3.24 O		1.24	1.24	r
1634-04-4	Methyl tert-butyl ether(MTBE)	1.39	U	1.39	1.39	r
78-93-3	Methyl Ethyl Ketone	25.7		1.70	1.70	r
110-54-3	Hexane	19.3	S	1.42	1.42	r
67-66-3	Chloroform	4.18		1.02	1.02	r
141-78-6	Ethyl acetate	1.39	U	1.39	1.39	r
109-99-9	Tetrahydrofuran	17.3		1.70	1.70	r
71-55-6	1,1,1-Trichloroethane	178		0.917	0.917	r
71-43-2	Benzene	11.3		1.57	1.57	r
110-82-7	Cyclohexane	8.50		1.45	1.45	r
79-01-6	Trichloroethene	1.31		0.186	0.186	r
142-82-5	Heptane	10.1		1.22	1.22	r
108-10-1	4-Methyl-2-pentanone(MIBK)	1.22	U	1.22	1.22	r
10061-02-6	trans-1,3-Dichloropropene	1.10	U	1.10	1.10	r
108-88-3	Toluene	24.4		1.33	1.33	r
591-78-6	2-Hexanone(MBK)	1.22	U	1.22	1.22	r
127-18-4	Tetrachloroethene	196 O		0.184	0.184	r
630-20-6	1,1,1,2-Tetrachloroethane	0.729	U	0.729	0.729	r
108-90-7	Chlorobenzene	1.09	U	1.09	1.09	r
100-41-4	Ethylbenzene	6.66		1.15	1.15	r
179601-23-1	m,p-Xylene	28.8		1.15	1.15	r
100-42-5	Styrene	1.17	U	1.17	1.17	r
95-47-6	o-Xylene	12.1		1.15	1.15	r
98-82-8	Isopropylbenzene	1.02	U	1.02	1.02	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CJ63031 5X
Canister:	12858	Lab File ID:	1021_25.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200	(cc)	Date Analyzed: 10/22/21
Matrix:	AIR	Dilution Factor:	5

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

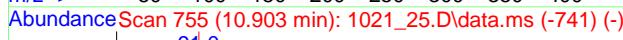
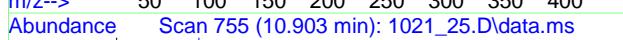
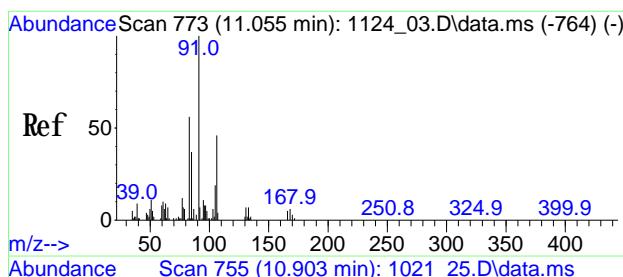
## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM20\100CT\20A\  
 Data File : 1021\_25.D  
 Acq On : 22 Oct 2021 3:42 am  
 Operator :  
 Client ID : SV-6 5X  
 Lab ID : CJ63031 5X  
 ALS Vial : 56 Sample Multiplier: 1

Quant Time: Oct 22 09:40:49 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 QLast Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

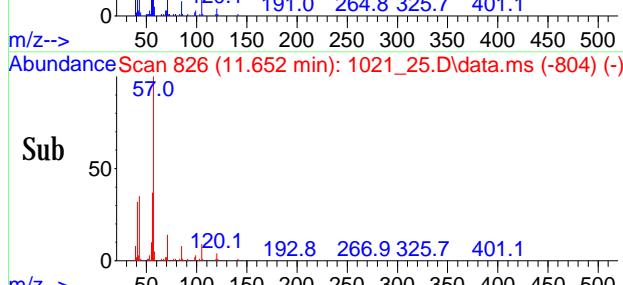
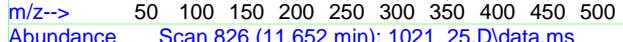
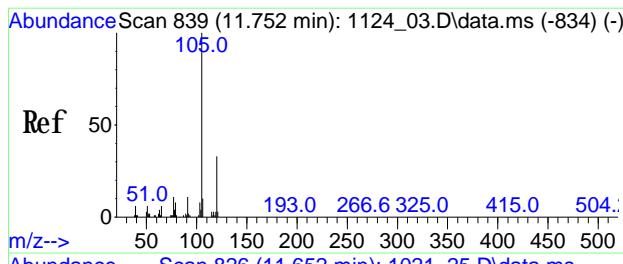
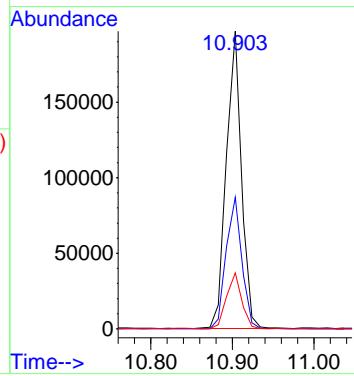
Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.627	130	279204	10.000	ng	0.00
37) 1, 4-Difluorobenzene	7.780	114	1106656	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	494846	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.633	130	311164	10.000	ng	# 0.00
96) 1, 4-Difluorobenzene(sim)	7.780	114	1106656	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	493738	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.160	95	618627	10.172	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	= 101.70%	
<b>Target Compounds</b>						
2) Propylene	3.507	41	254100	7.690	ppbv	98
7) 1, 3-Butadiene	3.960	54	54489	1.938	ppbv#	1
11) Ethanol	4.467	45	355540	23.370	ppbv	99
12) Acetone	4.736	43	7014765	112.721	ppbv	95
13) Trichlorofluoromethane	4.801	101	16027	0.220	ppbv#	91
16) 1, 1-Dichloroethene	5.226	61	2545	0.046	ppbv#	63
20) Carbon Disulfide	5.484	76	83084	1.104	ppbv	96
23) 1, 1-Dichloroethane	6.016	63	35769	0.648	ppbv	98
26) Methyl Ethyl Ketone	6.323	43	458848	5.134	ppbv#	64
27) Cis-1, 2-Dichloroethene	6.523	61	3969	0.102	ppbv	95
28) Hexane	6.637	57	220176	3.863	ppbv#	80
29) Chloroform	6.700	83	50201	0.835	ppbv	93
31) Tetrahydrofuran	7.033	42	177248	3.460	ppbv	93
33) 1, 1, 1-Trichloroethane	7.304	97	2266750	35.675	ppbv	98
34) Benzene	7.590	78	190976	2.260	ppbv#	92
36) Cyclohexane	7.746	41	67328	1.699	ppbv	95
40) Trichloroethene	8.214	130	11085	0.261	ppbv	97
44) Heptane	8.370	43	184458	2.016	ppbv#	94
49) Toluene	9.294	91	509720	4.876	ppbv	100
53) Tetrachloroethene	9.944	166	2122027	39.102	ppbv	97
57) Ethylbenzene	10.534	91	172700	1.332	ppbv	99
58) m,p-Xylene	10.627	91	561526	5.758	ppbv	99
62) o-Xylene	10.903	91	252301	2.417	ppbv	98
67) 4-Ethyltoluene	11.652	105	101346	0.712	ppbv#	75
68) 1, 3, 5-Trimethylbenzene	11.652	105	101648	0.812	ppbv#	95
69) 1, 2, 4-Trimethylbenzene	11.908	105	331057	2.630	ppbv#	83
73) 1, 4-Dichlorobenzene	12.052	146	9772	0.165	ppbv#	72
77) n-Butylbenzene	12.432	91	26732	0.195	ppbv#	38
85) Trichlorofluoromethane...	4.806	101	18229	0.217	ppbv#	99
87) 1, 1, 1-Trichloroethane(...)	7.310	97	2497098	34.164	ppbv#	99
88) Benzene(sim)	7.590	78	190976	2.112	ppbv#	92
93) 1, 1-Dichloroethane(sim)	6.021	63	39787	0.617	ppbv	99
94) Cis-1, 2-Dichloroethene...	6.523	61	3969	0.087	ppbv	95
95) Chloroform(sim)	6.705	83	54921	0.812	ppbv	94
99) Trichloroethene(sim)	8.220	130	12651	0.247	ppbv	99
105) Tetrachloroethene(sim)	9.950	166	2538571	37.522	ppbv	100
108) m,p-Xylene(sim)	10.627	91	563694	4.981	ppbv	99
118) n-Butylbenzene(sim)	12.432	91	26724	0.191	ppbv#	38

(#)out of range (m)manual integration reviewed by analyst (+)signals summed



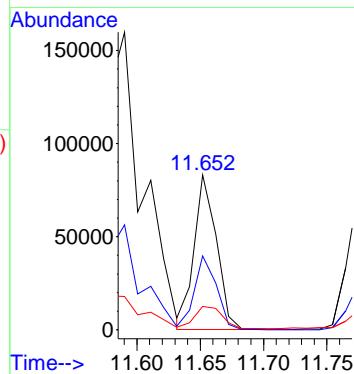
#62  
o-Xylene  
Conc: 88 2,417 ppbv  
RT: 10.903 min Scan# 755  
Delta R.T. -0.011 min  
Lab File: 1021\_25.D  
Acq: 22 Oct 2021 3:42 am

Tgt Ion: 91 Resp: 252301  
Ion Ratio Lower Upper  
91 100  
106 46.0 37.7 56.5  
105 18.9 15.6 23.4



#67  
4-Ethyltoluene  
Conc: 88 0.712 ppbv  
RT: 11.652 min Scan# 826  
Delta R.T. 0.031 min  
Lab File: 1021\_25.D  
Acq: 22 Oct 2021 3:42 am

Tgt Ion: 105 Resp: 101346  
Ion Ratio Lower Upper  
105 100  
120 47.7 26.0 39.0#  
77 18.1 8.8 13.2#



N - out of criteria ratio

## AIR ANALYSIS DATA SHEET

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	SV-6 15X
SDG No.:	GCJ63027	Lab Sample ID:	CJ63031 15X	
Canister:	12858	Lab File ID:	1022_14.D	
Instrument:	CHEM20	Column:	RTX-1 60M	
Purge Volume	200	(cc)	Date Received:	10/21/21
Matrix:	AIR		Date Analyzed:	10/22/21
Dilution Factor:	15			

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

This form 1 and the associated quantitation report are filtered for detected compounds in the undiluted analysis.

## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM20\100CT\22\  
 Data File : 1022\_14.D  
 Acq On : 22 Oct 2021 6:47 pm  
 Operator :  
 Client ID : SV-6 15X  
 Lab ID : CJ63031 15X  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 25 08:42:21 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 QLast Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.627	130	263711	10.000	ng	0.00
37) 1, 4-Difluorobenzene	7.779	114	1024273	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	450744	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.632	130	295724	10.000	ng	# 0.00
96) 1, 4-Difluorobenzene(sim)	7.779	114	1023967	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	450821	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.159	95	548629	9.904	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	=	99.00%
<b>Target Compounds</b>						
2) Propylene	3.507	41	114039	3.654	ppbv	92
7) 1, 3-Butadiene	3.960	54	15955	0.601	ppbv#	1
11) Ethanol	4.477	45	101008	7.029	ppbv	98
12) Acetone	4.768	43	1981643	33.714	ppbv	96
20) Carbon Disulfide	5.493	76	24337	0.342	ppbv	97
26) Methyl Ethyl Ketone	6.355	43	131554	1.558	ppbv#	64
28) Hexane	6.637	57	63899	1.187	ppbv#	82
29) Chloroform	6.700	83	14619	0.258	ppbv	94
31) Tetrahydrofuran	7.054	42	49427	1.021	ppbv	94
33) 1, 1, 1-Trichloroethane	7.304	97	639087	10.649	ppbv	98
34) Benzene	7.579	78	47561	0.596	ppbv#	83
36) Cyclohexane	7.746	41	16984	0.454	ppbv#	78
40) Trichloroethene	8.214	130	1496	0.038	ppbv	94
44) Heptane	8.370	43	51985	0.614	ppbv#	94
49) Toluene	9.294	91	143141	1.480	ppbv	98
53) Tetrachloroethene	9.944	166	584113	11.629	ppbv	98
57) Ethylbenzene	10.534	91	48370	0.410	ppbv	95
58) m, p-Xylene	10.626	91	154528	1.740	ppbv	99
62) o-Xylene	10.903	91	70266	0.739	ppbv	97
67) 4-Ethyltoluene	11.590	105	80855	0.624	ppbv#	98
68) 1, 3, 5-Trimethylbenzene	11.652	105	28125	0.247	ppbv#	94
69) 1, 2, 4-Trimethylbenzene	11.908	105	87882	0.767	ppbv#	84
87) 1, 1, 1-Trichloroethane(...)	7.309	97	705121	10.151	ppbv#	98
88) Benzene(sim)	7.579	78	47561	0.554	ppbv#	83
95) Chloroform(sim)	6.705	83	15642	0.243	ppbv#	93
105) Tetrachloroethene(sim)	9.950	166	722130	11.536	ppbv	100
108) m, p-Xylene(sim)	10.626	91	154700	1.497	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CANISTER BLK 2274
SDG No.:	GCJ63027	Lab Sample ID:	CANISTER BLK 2274	
Canister:	CANBL	Lab File ID:	1008_11.D	
Instrument:	CHEM24	Date Received:		
Purge Volume	200 (cc)	Date Analyzed:	10/08/21	
Matrix:	AIR	Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.202	U	0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.421	U	0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.863	U	0.863	0.863	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-42-5	Styrene	0.235	U	0.235	0.235	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.204	U	0.204	0.204	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
71-43-2	Benzene(sim)	0.313	U	0.313	0.313	r
56-23-5	Carbon Tetrachloride(sim)	0.032	U	0.032	0.032	r
75-35-4	1,1-Dichloroethene(sim)	0.051	U	0.051	0.051	r

## FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CANISTER BLK 2274
SDG No.:	GCJ63027	Lab Sample ID:	CANISTER BLK 2274	
Canister:	CANBL	Lab File ID:	1008_11.D	
Instrument:	CHEM24	Column:		
Purge Volume	200	(cc)	Date Analyzed:	10/08/21
Matrix:	AIR	Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CANISTER BLK 2276
SDG No.:	GCJ63027	Lab Sample ID:	CANISTER BLK 2276	
Canister:	CANBL	Lab File ID:	1008_13.D	
Instrument:	CHEM24	Column:		
Purge Volume	200 (cc)	Date Analyzed:	10/08/21	
Matrix:	AIR	Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.202	U	0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.421	U	0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.863	U	0.863	0.863	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-42-5	Styrene	0.235	U	0.235	0.235	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.204	U	0.204	0.204	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
71-43-2	Benzene(sim)	0.313	U	0.313	0.313	r
56-23-5	Carbon Tetrachloride(sim)	0.032	U	0.032	0.032	r
75-35-4	1,1-Dichloroethene(sim)	0.051	U	0.051	0.051	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CANISTER BLK 2276
Canister:	CANBL	Lab File ID:	1008_13.D
Instrument:	CHEM24	Column:	
Purge Volume	200	(cc)	Date Analyzed: 10/08/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CANISTER BLK 2277
SDG No.:	GCJ63027	Lab Sample ID:	CANISTER BLK 2277	
Canister:	CANBL	Lab File ID:	1012_24.D	
Instrument:	CHEM24	Column:		
Purge Volume	200 (cc)	Date Received:		
Matrix:	AIR	Date Analyzed:	10/13/21	
		Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.202	U	0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.421	U	0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.863	U	0.863	0.863	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-42-5	Styrene	0.235	U	0.235	0.235	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.204	U	0.204	0.204	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
71-43-2	Benzene(sim)	0.313	U	0.313	0.313	r
56-23-5	Carbon Tetrachloride(sim)	0.032	U	0.032	0.032	r
75-35-4	1,1-Dichloroethene(sim)	0.051	U	0.051	0.051	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63027	Lab Sample ID:	CANISTER BLK 2277
Canister:	CANBL	Lab File ID:	1012_24.D
Instrument:	CHEM24	Column:	
Purge Volume	200	(cc)	Date Analyzed: 10/13/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

**C. SAMPLE DELIVERY GROUP GCJ61984**

## ORGANIC ANALYSIS SUPPORT DOCUMENTATION

Client Name: GZA GeoEnvironmental of New York  
 Site/Project Name: 2022 DUSR BCP Bronx  
 Job Number/Task/Subtask: PROJ-021403 Ambient/Indoor Air Report  
 Laboratory/Location: Phoenix Inc.  
 SDG: GCJ61984  
 Sample Collection Dates: 10/20/21

EnvStd Project Manager: STZ  
 Reviewed by: JAB  
 Approved by: STZ  
 Completion Date: 10/24/22  
 Validation Level: 4

The following table indicates criteria that were examined, the identified problems, and support documentation attachments.

Parameter/ Method	Criteria Examined in Detail							Problems Identified													
	Note: All items examined have been included in the Support Document unless otherwise noted.																				
	Check (✓) if Yes or Footnote Letter for Comments Below																				
	TO-15								TO-15												
Condition upon Receipt	X																				
Sample Preservation	X																				
Holding Times	X																				
Blank Analysis Results	X																				
Surrogates	X																				
Laboratory Control Sample	X									X											
Matrix Spike/Matrix Spike Duplicate																					
Laboratory Duplicate	X																				
Field Duplicate																					
Sample Preparation	X																				
Detection Limit/Sensitivity	X																				
Mass Tuning	X																				
GC Instrument Performance – Resolution Checks and DDT/Endrin Breakdown																					
Initial Calibrations	X																				
Continuing Calibrations	X																				
Internal Standard Performance	X																				
Retention Time Shifts	X																				
Quantitation of Results	X																				
Qualitative Identification: Targets	X									X											
Qualitative Identification: TICs																					
Multiple Dilutions/Analyses																					
Analytical Sequence	X																				
GC Column Agreement																					
Manual Integration	X																				
Percent Solids																					
Extract Cleanup Documentation, Checks, and Calibrations																					
Deliverable was Complete	X									X											
Others:																					

**Comments:** Qualitative Identification, Quantitation of Results, and Manual Integrations are not included in the Support Documentation unless a problem was identified.

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## BLANK ANALYSIS RESULTS FOR ORGANIC PARAMETERS

1 - V = Volatile; S = Semivolatile; P = Pesticide/PCB; O = Other:

2 - MB = Method Blank; TB = Trip Blank; EB = Equipment Blank; FB = Field Blank;  
IB = Instrument Blank; SB = Storage Blank

## Notes:

2C  
AIR SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No.:  SDG: GCJ61984

QC Batch Id: 597233 QC Sample Id: CJ60437

CLIENT ID	LAB ID	SMC1 BFB #				TOT OUT
01 CJ60437 LCS	CJ60437 LCS	102				0
02 CJ60437 BLANK	CJ60437 BLANK	96				0
03 CJ60437 QC	CJ60437 QC	98				0
04 60437 dup	CJ60437 DUP	100				0
05 IA-1	CJ61984	101				0
06 OA-1	CJ61985	99				0
07						
08						
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28						
29						
30						

SMC1      BFB

Bromofluorobenzene

QC LIMITS  
(70-130)

# Column to be used to flag recovery values  
 \* Values outside of contract required QC limits  
 D Surrogate diluted out

FORM II AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No:  SAS No:  SDG No GCJ61984

LCS - Client Id: CJ60437 LCS ✓

COMPOUND	SPIKE ADDED (ppbv)		LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Propylene	10		11.03	110	70 130
Dichlorodifluoromethane	10		12.61	126	70 130
Chloromethane	10		12.00	120	70 130
1,2-Dichlorotetrafluoroethane	10		11.60	116	70 130
Vinyl Chloride	10		11.76	118	70 130
1,3-Butadiene	10		10.95	110	70 130
Bromomethane	10		10.66	107	70 130
Chloroethane	10		10.07	101	70 130
Ethanol	5		4.985	100	70 130
Acetone	10		10.87	109	70 130
Trichlorofluoromethane	10		12.08	121	70 130
Isopropylalcohol	7	J+ both samples	9.163	131	70 130
Acrylonitrile	10		10.30	103	70 130
1,1-Dichloroethene	10		11.27	113	70 130
Methylene Chloride	10		9.210	92	70 130
Carbon Disulfide	10		10.32	103	70 130
Trichlorotrifluoroethane	10		11.28	113	70 130
Trans-1,2-Dichloroethene	10		10.39	104	70 130
1,1-Dichloroethane	10		10.84	108	70 130
Methyl tert-butyl ether(MTBE)	10		10.80	108	70 130
Methyl Ethyl Ketone	10		10.39	104	70 130
Cis-1,2-Dichloroethene	10		10.93	109	70 130
Hexane	10		9.772	98	70 130
Chloroform	10		10.67	107	70 130
Ethyl acetate	10		12.30	123	70 130
Tetrahydrofuran	10		10.23	102	70 130
1,2-Dichloroethane	10		11.63	116	70 130
1,1,1-Trichloroethane	10		11.13	111	70 130
Benzene	10		9.918	99	70 130
Carbon Tetrachloride	10		11.63	116	70 130
Cyclohexane	10		10.12	101	70 130
1,2-dichloropropane	10		10.28	103	70 130
Bromodichloromethane	10		11.25	113	70 130
Trichloroethene	10		10.73	107	70 130
1,4-Dioxane	10		9.208	92	70 130
Heptane	10		10.67	107	70 130
cis-1,3-Dichloropropene	10		10.68	107	70 130
4-Methyl-2-pentanone(MIBK)	10		10.98	110	70 130
trans-1,3-Dichloropropene	10		10.29	103	70 130
1,1,2-Trichloroethane	10		10.14	101	70 130
Toluene	10		10.53	105	70 130
Dibromochloromethane	10		11.60	116	70 130
2-Hexanone(MBK)	10		10.89	109	70 130
1,2-Dibromoethane(EDB)	10		10.91	109	70 130

FORM III AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No: SAS No: SDG No GCJ61984

LCS - Client Id: CJ60437 LCS

FORM III AIR

4A  
AIR METHOD BLANK SUMMARY

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Client ID

CJ60437 BLANK

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ61984

Lab File ID: 1020\_06.D

Lab Sample ID: CJ60437 BLK

Date Analyzed: 10/20/2021

Time Analyzed: 16:31

GC Column: RTX-VMS

Lab Batch ID: 597233

Instrument ID: CHEM24

Heated Purge:(Y/N) Y

THIS METHOD BLANK APPLIES TO THE FOLLOWING QC AND FIELD SAMPLES:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01 CJ60437 LCS	CJ60437 LCS	1020_04.D	15:29
02 CJ60437 QC	CJ60437	1020_10.D	19:00
03 60437 dup	CJ60437 DUP	1020_11.D	19:36
04 IA-1	CJ61984	1020_21.D	03:09
05 OA-1	CJ61985	1020_22.D	03:45
06			
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19			
20			

COMMENTS: \_\_\_\_\_

FORM IV AIR

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

CJ60437 BLANK ✓

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ61984	Lab Sample ID:	CJ60437 BL
Canister:	BL	Lab File ID:	1020_06.D
Instrument:	CHEM24	Column:	RTX-VMS
Purge Volume	200 (cc)	Date Analyzed:	10/20/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.580	U	0.580	0.580	r
75-71-8	Dichlorodifluoromethane	0.200	U	0.200	0.200	r
74-87-3	Chloromethane	0.480	U	0.480	0.480	r
106-99-0	1,3-Butadiene	0.450	U	0.450	0.450	r
75-00-3	Chloroethane	0.380	U	0.380	0.380	r
64-17-5	Ethanol	0.530	U	0.530	0.530	r
67-64-1	Acetone	0.420	U	0.420	0.420	r
67-63-0	Isopropylalcohol	0.410	U	0.410	0.410	r
107-13-1	Acrylonitrile	0.460	U	0.460	0.460	r
75-09-2	Methylene Chloride	0.860	U	0.860	0.860	r
75-15-0	Carbon Disulfide	0.320	U	0.320	0.320	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.280	U	0.280	0.280	r
78-93-3	Methyl Ethyl Ketone	0.340	U	0.340	0.340	r
110-54-3	Hexane	0.280	U	0.280	0.280	r
141-78-6	Ethyl acetate	0.280	U	0.280	0.280	r
109-99-9	Tetrahydrofuran	0.340	U	0.340	0.340	r
110-82-7	Cyclohexane	0.290	U	0.290	0.290	r
142-82-5	Heptane	0.240	U	0.240	0.240	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.240	U	0.240	0.240	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.270	U	0.270	0.270	r
591-78-6	2-Hexanone(MBK)	0.240	U	0.240	0.240	r
108-90-7	Chlorobenzene	0.220	U	0.220	0.220	r
100-42-5	Styrene	0.230	U	0.230	0.230	r
98-82-8	Isopropylbenzene	0.200	U	0.200	0.200	r
622-96-8	4-Ethyltoluene	0.200	U	0.200	0.200	r
108-67-8	1,3,5-Trimethylbenzene	0.200	U	0.200	0.200	r
95-63-6	1,2,4-Trimethylbenzene	0.200	U	0.200	0.200	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.140	U	0.140	0.140	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.260	U	0.260	0.260	r
75-69-4	Trichlorofluoromethane(sim)	0.180	U	0.180	0.180	r
71-55-6	1,1,1-Trichloroethane(sim)	0.180	U	0.180	0.180	r
71-43-2	Benzene(sim)	0.310	U	0.310	0.310	r
56-23-5	Carbon Tetrachloride(sim)	0.032	U	0.032	0.032	r
75-35-4	1,1-Dichloroethene(sim)	0.050	U	0.050	0.050	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ61984	Lab Sample ID:	CJ60437 BL
Canister:	BL	Lab File ID:	1020_06.D
Instrument:	CHEM24	Column:	RTX-VMS
Purge Volume	200	(cc)	Date Analyzed: 10/20/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

5B  
AIR INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ61984

Lab File ID: 1012\_04.D

BFB Injection Date: \_\_\_\_\_

10/12/21

Instrument ID: CHEM24

BFB Injection Time: \_\_\_\_\_

18:34

GC Column: RTX-VMS

Heated Purge: (Y/N) \_\_\_\_\_

Y

AutoFind: Scans 1626, 1627, 1628; Background Corrected with Scan 1614

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.7
75	30.0 - 66.0% of mass 95	47.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95 <input checked="" type="radio"/>	6.6 <input checked="" type="radio"/>
173	Less than 2.0% of mass 174	0.0 ( 0.0 )1
174	50.0 - 120.0% of mass 95	92.3
175	4.0 - 9.0% of mass 174	8.0 ( 7.4 )1
176	93.0 - 101.0% of mass 174 <input checked="" type="radio"/>	96.7 <input checked="" type="radio"/> ( 89.3 )1
177	5.0 - 9.0% of mass 176	6.7 ( 6.0 )1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01 ICAL 0.02	0.02 ppb	1012_05.D	10/12/21	19:05	
02 ICAL 0.035	0.035 ppb	1012_06.D	10/12/21	19:37	
03 ICAL 0.05	0.05 ppb	1012_07.D	10/12/21	20:09	
04 ICAL 0.1	0.10 ppb	1012_08.D	10/12/21	20:41	
05 ICAL 0.2	0.20 ppb	1012_09.D	10/12/21	21:15	
06 ICAL 0.5	0.50 ppb	1012_10.D	10/12/21	21:51	
07 ICAL 2.5	2.5 ppb	1012_11.D	10/12/21	22:28	
08 ICAL 5	5.0 ppb	1012_12.D	10/12/21	23:00	
09 ICAL 25	25 ppb	1012_13.D	10/12/21	23:36	
10 ICAL 40	40 ppb	1012_14.D	10/13/21	00:29	
11 ICAL 1	1ppb ;	1012_16.D	10/13/21	01:34	
12 ICAL 10	10ppb ;	1012_17.D	10/13/21	02:07	
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

(\*) Outside 24 hr clock

FORM V AIR

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs  
 Lab Code: Phoenix  
 Instrument ID: CHEM24  
 Heated Purge (Y/N): Y  
 GC Column: \_\_\_\_\_

Client: \_\_\_\_\_  
 SDG No.: GCJ61984  
 Calibration Date From: 10/12/21 21:15  
 Calibration Date Thru: 10/13/21 02:07  
 Method File: 24AIR\_1012.M

validated in SDG GCJ61984

Laboratory File Ids

	<u>RRF1</u>	<u>1012_05.D</u>	<u>RRF2</u>	<u>1012_06.D</u>	<u>RRF3</u>	<u>1012_07.D</u>	<u>RRF4</u>	<u>1012_08.D</u>	<u>RRF5</u>	<u>1012_09.D</u>	<u>RRF6</u>	<u>1012_10.D</u>		% RSD
COMPOUND		RRF1 0.02	RRF2 0.035	RRF3 0.05	RRF4 0.1	RRF5 0.2	RRF6 0.5	RRF7 1	RRF8 2.5	RRF9 5	RRF10 10	RRF11 25	RRF12 40	% RSD
Propylene					1.023	0.883	0.815	0.784	0.813	0.796	0.759	0.728	0.825	11.12
Dichlorodifluoromethane				2.368	2.544	2.510	2.466	2.501	2.610	2.619	2.520	2.365	2.500	3.62
Chloromethane				1.548	1.495	1.314	1.288	1.351	1.341	1.333	1.282	1.223	1.353	7.69
1,2-Dichlorotetrafluoroethane				1.809	1.738	1.733	1.714	1.688	1.728	1.756	1.689	1.610	1.718	3.18
Vinyl Chloride				0.925	0.963	0.879	0.887	0.868	0.910	0.931	0.869	0.860	0.899	3.89
1,3-Butadiene				1.002	0.877	0.721	0.718	0.719	0.723	0.745	0.706	0.697	0.768	13.43
Bromomethane					0.937	0.961	0.894	0.896	0.913	0.925	0.898	0.882	0.913	2.89
Chloroethane				0.545	0.406	0.380	0.382	0.349	0.361	0.364	0.351	0.345	0.387	16.09
Ethanol					0.445	0.410	0.347	0.348	0.329	0.295	0.301	0.354	0.354	15.72
Acetone						1.834	1.728	1.789	1.736	2.008	1.959	1.842	1.842	6.34
Trichlorofluoromethane			2.830	2.743	2.691	2.717	2.705	2.751	2.797	2.720	2.588	2.727	2.51	
Isopropylalcohol						1.936	2.001	2.201	2.097	1.845	2.069	2.025	6.20	
Acrylonitrile				0.749	0.729	0.720	0.703	0.740	0.720	0.711	0.696	0.721	2.48	
1,1-Dichloroethene			1.765	1.836	1.691	1.623	1.666	1.684	1.702	1.655	1.632	1.695	4.00	
Methylene Chloride				2.105	1.619	1.485	1.391	1.375	1.370	1.255	1.298	1.487	18.41	
Carbon Disulfide				2.474	2.424	2.336	2.382	2.407	2.456	2.373	2.365	2.402	1.98	
Trichlorotrifluoroethane			2.025	1.984	1.890	1.930	1.935	1.984	2.012	1.958	1.910	1.959	2.35	
Trans-1,2-Dichloroethene			1.788	1.644	1.520	1.555	1.563	1.596	1.587	1.538	1.523	1.590	5.27	
1,1-Dichloroethane			1.741	1.786	1.747	1.784	1.766	1.787	1.792	1.757	1.720	1.765	1.42	
Methyl tert-butyl ether(MTBE)				2.644	2.508	2.351	1.932	2.315	2.448	2.381	2.306	2.361	8.76	
Methyl Ethyl Ketone				2.326	2.418	2.644	2.482	2.486	2.520	2.324	2.297	2.437	4.88	
Cis-1,2-Dichloroethene			1.609	1.450	1.409	1.459	1.459	1.488	1.502	1.487	1.468	1.481	3.72	
Hexane				1.685	1.567	1.411	1.441	1.422	1.402	1.434	1.922	1.535	12.01	
Chloroform			2.321	2.315	2.150	2.213	2.193	2.256	2.238	2.220	2.133	2.227	2.92	
Ethyl acetate				4.122	2.949	2.952	3.060	3.018	3.079	3.006	2.909	3.137	12.82	

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, q2i, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ61984

Instrument ID: CHEM24

Calibration Date From: 10/12/21 21:15

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 02:07

GC Column: \_\_\_\_\_

Method File: 24AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_05.D</u>	<u>RRF2</u>	<u>1012_06.D</u>	<u>RRF3</u>	<u>1012_07.D</u>	<u>RRF4</u>	<u>1012_08.D</u>	<u>RRF5</u>	<u>1012_09.D</u>	<u>RRF6</u>	<u>1012_10.D</u>		
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD
Tetrahydrofuran					0.783	0.901	0.830	0.759	0.767	0.774	0.733	0.711	0.782	7.59
1,2-Dichloroethane				1.646	1.572	1.642	1.661	1.662	1.640	1.691	1.692	1.643	1.650	2.14
1,1,1-Trichloroethane				2.536	2.635	2.342	2.279	2.342	2.401	2.392	2.356	2.278	2.396	4.93
Benzene				2.685	2.336	2.395	2.316	2.306	2.338	2.371	2.362	2.295	2.378	5.03
Carbon Tetrachloride				2.552	2.728	2.635	2.678	2.602	2.684	2.738	2.716	2.603	2.660	2.44
Cyclohexane					1.816	1.605	1.531	1.510	1.587	1.592	1.543	1.501	1.586	6.36
1,2-dichloropropane				0.322	0.351	0.328	0.320	0.317	0.328	0.329	0.331	0.330	0.329	2.97
Bromodichloromethane				0.704	0.721	0.674	0.694	0.678	0.708	0.732	0.729	0.724	0.707	3.04
Trichloroethene				0.355	0.404	0.378	0.386	0.382	0.388	0.401	0.394	0.401	0.388	3.97
1,4-Dioxane				0.142	0.162	0.156	0.145	0.133	0.158	0.153	0.143	0.149	0.149	6.22
Heptane				0.843	0.657	0.591	0.566	0.561	0.595	0.574	0.582	0.573	0.616	14.59
cis-1,3-Dichloropropene				0.458	0.509	0.457	0.473	0.462	0.475	0.478	0.492	0.491	0.477	3.66
4-Methyl-2-pentanone(MIBK)					0.885	0.823	0.803	0.789	0.856	0.843	0.843	0.820	0.833	3.68
trans-1,3-Dichloropropene				0.497	0.464	0.447	0.470	0.478	0.478	0.490	0.493	0.492	0.479	3.44
1,1,2-Trichloroethane				0.436	0.360	0.352	0.364	0.337	0.345	0.355	0.357	0.358	0.363	7.93
Toluene				0.826	0.860	0.824	0.855	0.844	0.854	0.876	0.888	0.869	0.855	2.51
Dibromochloromethane				0.708	0.797	0.801	0.809	0.807	0.827	0.860	0.828	0.866	0.812	5.65
2-Hexanone(MBK)					0.859	0.760	0.750	0.735	0.837	0.822	0.643	0.837	0.780	9.28
1,2-Dibromoethane(EDB)				0.586	0.636	0.616	0.637	0.639	0.652	0.671	0.645	0.679	0.640	4.32
Tetrachloroethene				0.506	0.520	0.487	0.512	0.516	0.512	0.533	0.525	0.530	0.516	2.69
1,1,1,2-Tetrachloroethane				0.974	1.007	0.988	0.990	0.986	0.996	1.055	1.028	1.008	1.004	2.47
Chlorobenzene				1.537	1.521	1.553	1.519	1.515	1.535	1.597	1.568	1.533	1.542	1.72
Ethylbenzene					2.172	2.505	2.315	2.412	2.353	2.342	2.492	2.463	2.370	4.36
m,p-Xylene				1.724	1.878	1.875	1.525	1.811	1.847	1.966	1.922	1.734	1.809	7.36
Bromoform				1.459	1.514	1.606	1.533	1.539	1.586	1.681	1.710	1.650	1.586	5.24

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, qii2, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ61984

Instrument ID: CHEM24

Calibration Date From: 10/12/21 21:15

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 02:07

GC Column: \_\_\_\_\_

Method File: 24AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_05.D</u>	<u>RRF2</u>	<u>1012_06.D</u>	<u>RRF3</u>	<u>1012_07.D</u>	<u>RRF4</u>	<u>1012_08.D</u>	<u>RRF5</u>	<u>1012_09.D</u>	<u>RRF6</u>	<u>1012_10.D</u>		
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD
Styrene				1.397	1.314	1.403	1.366	1.334	1.341	1.436	1.448	1.385	1.380	3.33
1,1,2,2-Tetrachloroethane				1.609	1.504	1.508	1.512	1.497	1.494	1.566	1.606	1.521	1.535	3.00
o-Xylene				1.997	2.329	2.276	2.253	2.198	2.204	2.321	2.115	1.982	2.186	5.92
Isopropylbenzene				2.743	2.654	2.560	2.551	2.551	2.512	2.725	2.660	2.525	2.609	3.37
4-Ethyltoluene				2.565	2.718	2.602	2.697	2.644	2.618	2.793	2.773	2.625	2.670	2.95
1,3,5-Trimethylbenzene				2.280	2.222	2.202	2.223	2.208	2.185	2.318	2.298	2.184	2.236	2.24
1,2,4-Trimethylbenzene				2.351	2.245	2.174	2.267	2.213	2.191	2.317	2.359	2.230	2.261	3.00
Benzyl chloride				1.629	1.619	1.618	1.609	1.716	1.662	1.846	1.968	1.852	1.724	7.65
1,3-Dichlorobenzene				1.435	1.431	1.468	1.465	1.477	1.423	1.599	1.623	1.544	1.496	4.99
1,4-Dichlorobenzene				1.328	1.392	1.394	1.408	1.432	1.374	1.501	1.558	1.509	1.433	5.20
sec-Butylbenzene				3.079	3.139	3.130	3.072	3.047	3.059	3.252	3.193	2.988	3.107	2.60
4-Isopropyltoluene				2.821	2.545	2.695	2.631	2.606	2.599	2.764	2.772	2.573	2.667	3.71
1,2-Dichlorobenzene				1.171	1.211	1.217	1.200	1.210	1.165	1.283	1.270	1.270	1.222	3.55
n-Butylbenzene				2.180	1.892	1.977	2.070	2.088	2.091	2.233	2.207	2.103	2.094	5.19
1,2,4-Trichlorobenzene					0.398	0.450	0.505	0.461	0.400	0.563	0.586	0.715	0.510	21.09
Hexachlorobutadiene				0.802	0.751	0.787	0.800	0.755	0.680	0.756	0.733	0.759	0.758	4.97
1,2-Dichlorotetrafluoroethane(sim)	1.959	1.872	1.835	1.732	1.644	1.652	1.637	1.608	1.646				1.732	7.29
Vinyl Chloride(sim)		0.931	0.926	0.933	0.911	0.909	0.931	0.920	0.953				0.927	1.49
Bromomethane(sim)	0.947	1.010	1.007	0.982	0.920	0.917	0.868	0.852	0.872				0.930	6.45
Trichlorofluoromethane(sim)	2.539	2.547	2.639	2.644	2.714	2.712	2.720	2.749	2.818				2.676	3.45
1,1,1-Trichloroethane(sim)	1.866	2.232	2.242	2.417	2.544	2.236	2.177	2.231	2.292				2.248	8.17
Benzene(sim)	2.704	2.700	2.689	2.453	2.430	2.389	2.366	2.387					2.515	6.13
Carbon Tetrachloride(sim)	2.207	2.375	2.761	2.407	2.484	2.515	2.556	2.475	2.562				2.482	6.11
1,1-Dichloroethene(sim)	1.691	1.587	1.735	1.688	1.706	1.715	1.709	1.727	1.759				1.702	2.85
Trichlorotrifluoroethane(sim)	1.877	1.784	1.905	1.939	1.861	1.795	1.842	1.846	1.894				1.860	2.71

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, qi2, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ61984

Instrument ID: CHEM24

Calibration Date From: 10/12/21 21:15

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 02:07

GC Column: \_\_\_\_\_

Method File: 24AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_05.D</u>	<u>RRF2</u>	<u>1012_06.D</u>	<u>RRF3</u>	<u>1012_07.D</u>	<u>RRF4</u>	<u>1012_08.D</u>	<u>RRF5</u>	<u>1012_09.D</u>	<u>RRF6</u>	<u>1012_10.D</u>		
COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	<u>—</u>	% RSD
Trans-1,2-Dichloroethene(sim)	1.648	1.565	1.541	1.578	1.595	1.577	1.600	1.607	1.642				1.595	2.18
1,1-Dichloroethane(sim)	1.417	1.793	2.004	1.668	1.690	1.668	1.703	1.680	1.706				1.703	8.90
Cis-1,2-Dichloroethene(sim)	1.362	1.480	1.506	1.466	1.477	1.497	1.536	1.516	1.591				1.492	4.13
Chloroform(sim)	1.844	2.134	2.342	2.223	2.190	2.081	2.112	2.089	2.153				2.130	6.30
1,2-Dichloroethane(sim)	1.208	1.573	1.632	1.621	1.684	1.674	1.692	1.717	1.724				1.614	9.91
1,2-dichloropropane(sim)	0.296	0.330	0.345	0.324	0.349	0.338	0.350	0.346	0.358				0.337	5.54
Bromodichloromethane(sim)	0.516	0.676	0.746	0.681	0.711	0.690	0.694	0.678	0.708				0.678	9.50
Trichloroethene(sim)	0.296	0.377	0.387	0.384	0.405	0.395	0.410	0.401	0.417				0.386	9.37
1,4-Dioxane(sim)			0.180	0.142	0.162	0.156	0.147	0.133	0.158				0.154	9.87
cis-1,3-Dichloropropene(sim)	0.485	0.448	0.473	0.472	0.495	0.491	0.516	0.502					0.485	4.31
1,1,2-Trichloroethane(sim)	0.463	0.333	0.386	0.436	0.365	0.353	0.366	0.338	0.345				0.376	12.05
Dibromochloromethane(sim)	0.771	0.657	0.784	0.753	0.812	0.810	0.838	0.827	0.861				0.790	7.65
1,2-Dibromoethane(EDB)(sim)	0.708	0.550	0.608	0.586	0.636	0.617	0.637	0.639	0.652				0.626	7.07
Tetrachloroethene(sim)	0.440	0.450	0.529	0.504	0.541	0.529	0.552	0.542	0.554	0.567			0.521	8.35
Bromoform(sim)	1.969	1.411	1.537	1.511	1.623	1.662	1.600	1.595	1.633				1.616	9.47
1,1,1,2-Tetrachloroethane(sim)	1.229	0.873	1.121	0.947	1.002	0.984	0.991	0.985	0.995				1.014	10.16
Ethylbenzene(sim)	3.086	2.186	2.463	2.358	2.566	2.551	2.592	2.544					2.543	10.15
m,p-Xylene(sim)		1.856	1.785	1.779	1.878	1.875	1.906	1.812	1.847				1.842	2.50
o-Xylene(sim)	3.179	2.273	2.365	2.251	2.389	2.380	2.423	2.378					2.455	12.16
1,1,2,2-Tetrachloroethane(sim)	2.368	2.247	1.480	1.602	1.504	1.540	1.512	1.497	1.494				1.694	20.73
Benzyl chloride(sim)	2.178	1.803	1.724	1.599	1.622	1.735	1.757	1.849	1.792				1.784	9.44
1,3-Dichlorobenzene(sim)	2.179	1.633	1.453	1.441	1.427	1.466	1.465	1.477	1.422				1.551	15.71
1,4-Dichlorobenzene(sim)	2.155	1.716	1.582	1.489	1.546	1.590	1.590	1.631	1.562				1.651	12.03
sec-Butylbenzene(sim)		3.960	3.344	3.079	3.139	3.127	3.068	3.048	3.060				3.228	9.63
4-Isopropyltoluene(sim)		3.345	3.050	2.738	2.727	2.792	2.760	2.786	2.789				2.873	7.53

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, qii2, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

**Client:**

Lab Code: Phoenix

SDG No.: GCJ61984

Instrument ID: CHEM24

Calibration Date From: 10/12/21 21:15

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 02:07

### GC Column:

Method File: 24AIR 1012.M

## Laboratory File Ids

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, q2, qfi2) display concentrations and not response factors

**8A**  
**AIR INTERNAL STANDARD AREA AND RT SUMMARY**  
**Full Scan**

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ61984  
Lab Method / File Id: 24AIR\_1012.M / Average Date Analyzed: 10/13/21  
Instrument ID: CHEM24 Time Analyzed: 1:34  
GC Column: \_\_\_\_\_ ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## FORM VIII VOA

8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Sim Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ61984  
Lab Method / File Id: 24AIR\_1012.M / Average Date Analyzed: 10/13/21  
Instrument ID: CHEM24 Time Analyzed: 1:34  
GC Column: \_\_\_\_\_ ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## FORM VIII VOA

# Injection Log

Data Directory: H:\AIR2021\CHEM4\100CT\12\

Line	V1	FileName	SampleName	MscInfo	Injection Time
1)	46	1012_01.D	xxxxxxxxxxxx		10/12/21 17:01
2)	47	1012_02.D	xxxxxxxxxxxx		10/12/21 17:32
3)	48	1012_03.D	xxxxxxxxxxxx		10/12/21 18:03
4)	49	1012_04.D	BFB TUNE	0/0	10/12/21 18:34
5)	47	1012_05.D	ICAL 0.02	0.02 ppb	10/12/21 19:05
6)	48	1012_06.D	ICAL 0.035	0.035 ppb	10/12/21 19:37
7)	49	1012_07.D	ICAL 0.05	0.05 ppb	10/12/21 20:09
8)	50	1012_08.D	ICAL 0.1	0.10 ppb	10/12/21 20:41
9)	51	1012_09.D	ICAL 0.2	0.20 ppb	10/12/21 21:15
10)	52	1012_10.D	ICAL 0.5	0.50 ppb	10/12/21 21:51
11)	53	1012_11.D	ICAL 2.5	2.5 ppb	10/12/21 22:28
12)	54	1012_12.D	ICAL 5	5.0 ppb	10/12/21 23:00
13)	55	1012_13.D	ICAL 25	25 ppb	10/12/21 23:36
14)	56	1012_14.D	ICAL 40	40 ppb	10/13/21 0:29
15)	57	1012_15.D	xxxxxxxxxxxx		10/13/21 1:01
16)	58	1012_16.D	ICAL 1	1ppb ;	10/13/21 1:34
17)	59	1012_17.D	ICAL 10	10ppb ;	10/13/21 2:07
18)	60	1012_18.D	xxxxxxxxxxxx		10/13/21 2:44
19)	61	1012_19.D	xxxxxxxxxxxx		10/13/21 3:15
20)	62	1012_20.D	xxxxxxxxxxxx		10/13/21 3:46
21)	63	1012_21.D	xxxxxxxxxxxx		10/13/21 4:19
22)	64	1012_22.D	xxxxxxxxxxxx		10/13/21 4:53
23)	65	1012_23.D	xxxxxxxxxxxx		10/13/21 5:29
24)	66	1012_24.D	xxxxxxxxxxxx		10/13/21 6:05
25)	67	1012_25.D	xxxxxxxxxxxx		10/13/21 6:42
26)	68	1012_26.D	xxxxxxxxxxxx		10/13/21 7:18
27)	69	1012_27.D	xxxxxxxxxxxx		10/13/21 7:55
28)	70	1012_28.D	xxxxxxxxxxxx		10/13/21 8:56
29)	71	1012_29.D	xxxxxxxxxxxx		10/13/21 9:51
30)	72	1012_30.D	xxxxxxxxxxxx		10/13/21 10:22
31)	73	1012_31.D	xxxxxxxxxxxx		10/13/21 10:52
32)	74	1012_32.D	xxxxxxxxxxxx		10/13/21 12:10
33)	75	1012_33.D	xxxxxxxxxxxx		10/13/21 12:52
34)	76	1012_34.D	xxxxxxxxxxxx		10/13/21 13:34
35)	77	1012_35.D	xxxxxxxxxxxx		10/13/21 14:10
36)	78	1012_36.D	xxxxxxxxxxxx		10/13/21 14:47
37)	79	1012_37.D	xxxxxxxxxxxx		10/13/21 15:24
38)	80	1012_38.D	xxxxxxxxxxxx		10/13/21 16:00
39)	81	1012_39.D	xxxxxxxxxxxx		10/13/21 16:37
40)	82	1012_40.D	xxxxxxxxxxxx		10/13/21 17:09
41)	83	1012_41.D	xxxxxxxxxxxx		10/13/21 17:42
42)	84	1012_42.D	xxxxxxxxxxxx		10/13/21 18:19
43)	85	1012_43.D	xxxxxxxxxxxx		10/13/21 19:01
44)	86	1012_44.D	xxxxxxxxxxxx		10/13/21 19:42
45)	87	1012_45.D	xxxxxxxxxxxx		10/13/21 22:27
46)	88	1012_46.D	xxxxxxxxxxxx		10/13/21 23:01
47)	89	1012_47.D	xxxxxxxxxxxx		10/13/21 23:34

5B  
AIR INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ61984

Lab File ID: 1020\_02.D

BFB Injection Date: 10/20/21

Instrument ID: CHEM24

BFB Injection Time: 14:19

GC Column: RTX-VMS

Heated Purge: (Y/N) Y

AutoFind: Scans 1626, 1627, 1628; Background Corrected with Scan 1618

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	26.5
75	30.0 - 66.0% of mass 95	50.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 ( 0.0 )1
174	50.0 - 120.0% of mass 95	88.4
175	4.0 - 9.0% of mass 174	7.9 ( 7.0 )1
176	93.0 - 101.0% of mass 174	96.2 ( 85.0 )1
177	5.0 - 9.0% of mass 176	6.5  ( 5.5 )1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01 CCAL 1	1ppb cCal ; air34b ; ISTD 34N	1020_02.D	10/20/21	14:19	
02 CJ60437 LCS	CJ60437 LCS	1020_04.D	10/20/21	15:29	
03 CJ60437 BLANK	CJ60437 BLANK	1020_06.D	10/20/21	16:31	
04 CJ60437 QC	CJ60437 QC	1020_10.D	10/20/21	19:00	
05 60437 dup	CJ60437 DUP	1020_11.D	10/20/21	19:36	
06 IA-1	CJ61984	1020_21.D	10/21/21	03:09	
07 OA-1	CJ61985	1020_22.D	10/21/21	03:45	
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

(\*) Outside 24 hr clock

FORM V AIR

7A  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
 Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ61984  
 Instrument: CHEM24 Calibration Date: 10/20/21 Time: 14:19 ✓  
 Lab File Id: 1020\_02.D Init. Calib. Date(s): 10/12/21 10/13/21  
 Heated Purge (Y/N): Y Init. Calib. Times: 19:05 02:07  
 GC Column: RTX-VMS Method File: 24AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	LIMITS
Propylene	0.825	0.918		-11.3	30
Dichlorodifluoromethane	2.500	2.921		-16.8	30
Chloromethane	1.353	1.534		-13.4	30
1,2-Dichlorotetrafluoroethane	1.718	1.828		-6.4	30
Vinyl Chloride	0.899	0.934		-3.9	30
1,3-Butadiene	0.768	0.787		-2.5	30
Bromomethane	0.913	0.929		-1.8	30
Chloroethane	0.387	0.378		2.3	30
Ethanol	0.354	0.452		-27.7	30
Acetone	1.842	2.006		-8.9	30
Trichlorofluoromethane	2.727	3.161		-15.9	30
Isopropylalcohol	2.025	2.299		-13.5	30
Acrylonitrile	0.721	0.758		-5.1	30
1,1-Dichloroethene	1.695	1.799		-6.1	30
Methylene Chloride	1.487	1.527		-2.7	30
Carbon Disulfide	2.402	2.454		-2.2	30
Trichlorotrifluoroethane	1.959	2.009		-2.6	30
Trans-1,2-Dichloroethene	1.590	1.556		2.1	30
1,1-Dichloroethane	1.765	1.837		-4.1	30
Methyl tert-butyl ether(MTBE)	2.361	1.885		20.2	30
Methyl Ethyl Ketone	2.437	2.642		-8.4	30
Cis-1,2-Dichloroethene	1.481	1.534		-3.6	30
Hexane	1.535	1.464		4.6	30
Chloroform	2.227	2.406		-8.0	30
Ethyl acetate	3.137	3.325		-6.0	30
Tetrahydrofuran	0.782	0.776		0.8	30
1,2-Dichloroethane	1.650	1.813		-9.9	30
1,1,1-Trichloroethane	2.396	2.529		-5.6	30
Benzene	2.378	2.259		5.0	30
Carbon Tetrachloride	2.660	2.808		-5.6	30
Cyclohexane	1.586	1.584		0.1	30
1,2-dichloropropane	0.329	0.346		-5.2	30
Bromodichloromethane	0.707	0.759		-7.4	30
Trichloroethene	0.388	0.396		-2.1	30
1,4-Dioxane	0.149	0.133		10.7	30

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ61984

Instrument: CHEM24 Calibration Date: 10/20/21 Time: 14:19

Lab File Id: 1020\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:05 02:07

GC Column: RTX-VMS Method File: 24AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
Heptane	0.616	0.634		-2.9	30
cis-1,3-Dichloropropene	0.477	0.479		-0.4	30
4-Methyl-2-pentanone(MIBK)	0.833	0.863		-3.6	30
trans-1,3-Dichloropropene	0.479	0.476		0.6	30
1,1,2-Trichloroethane	0.363	0.359		1.1	30
Toluene	0.855	0.841		1.6	30
Dibromochloromethane	0.812	0.866		-6.7	30
2-Hexanone(MBK)	0.780	0.784		-0.5	30
1,2-Dibromoethane(EDB)	0.640	0.665		-3.9	30
Tetrachloroethene	0.516	0.518		-0.4	30
1,1,1,2-Tetrachloroethane	1.004	1.009		-0.5	30
Chlorobenzene	1.542	1.418		8.0	30
Ethylbenzene	2.380	2.276		4.4	30
m,p-Xylene	1.809	1.443		20.2	30
Bromoform	1.586	1.427		10.0	30
Styrene	1.380	1.253		9.2	30
1,1,2,2-Tetrachloroethane	1.535	1.466		4.5	30
o-Xylene	2.186	2.205		-0.9	30
Isopropylbenzene	2.609	2.477		5.1	30
4-Ethyltoluene	2.670	2.541		4.8	30
1,3,5-Trimethylbenzene	2.236	2.188		2.1	30
1,2,4-Trimethylbenzene	2.261	2.112		6.6	30
Benzyl chloride	1.724	1.605		6.9	30
1,3-Dichlorobenzene	1.496	1.413		5.5	30
1,4-Dichlorobenzene	1.433	1.387		3.2	30
sec-Butylbenzene	3.107	2.998		3.5	30
4-Isopropyltoluene	2.667	2.488		6.7	30
1,2-Dichlorobenzene	1.222	1.129		7.6	30
n-Butylbenzene	2.094	2.008		4.1	30
1,2,4-Trichlorobenzene	0.510	0.455		10.8	30
Hexachlorobutadiene	0.758	0.720		5.0	30
1,2-Dichlorotetrafluoroethane(sim)	1.732	1.716		0.9	30
Vinyl Chloride(sim)	0.927	0.963		-3.9	30
Bromomethane(sim)	0.930	0.872		6.2	30
Trichlorofluoromethane(sim)	2.676	3.143		-17.5	30

(\*) Recommended RRF not met   (+) %D exceeds criteria %   (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %

(#) Maximum %D not met.

7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ61984

Instrument: CHEM24 Calibration Date: 10/20/21 Time: 14:19

Lab File Id: 1020\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:05 02:07

GC Column: RTX-VMS Method File: 24AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	LIMITS
1,1,1-Trichloroethane(sim)	2.248	2.373		-5.6	30
Benzene(sim)	2.515	2.320		7.8	30
Carbon Tetrachloride(sim)	2.482	2.628		-5.9	30
1,1-Dichloroethene(sim)	1.702	1.829		-7.5	30
Trichlorotrifluoroethane(sim)	1.860	1.883		-1.2	30
Trans-1,2-Dichloroethene(sim)	1.595	1.640		-2.8	30
1,1-Dichloroethane(sim)	1.703	1.724		-1.2	30
Cis-1,2-Dichloroethene(sim)	1.492	1.587		-6.4	30
Chloroform(sim)	2.130	2.252		-5.7	30
1,2-Dichloroethane(sim)	1.614	1.904		-18.0	30
1,2-dichloropropane(sim)	0.337	0.359		-6.5	30
Bromodichloromethane(sim)	0.678	0.758		-11.8	30
Trichloroethene(sim)	0.386	0.420		-8.8	30
1,4-Dioxane(sim)	0.154	0.133		13.6	30
cis-1,3-Dichloropropene(sim)	0.485	0.517		-6.6	30
1,1,2-Trichloroethane(sim)	0.376	0.359		4.5	30
Dibromochloromethane(sim)	0.790	0.887		-12.3	30
1,2-Dibromoethane(EDB)(sim)	0.626	0.664		-6.1	30
Tetrachloroethene(sim)	0.521	0.568		-9.0	30
Bromoform(sim)	1.616	1.487		8.0	30
1,1,1,2-Tetrachloroethane(sim)	1.014	1.008		0.6	30
Ethylbenzene(sim)	2.543	2.539		0.2	30
m,p-Xylene(sim)	1.842	1.804		2.1	30
o-Xylene(sim)	2.455	2.368		3.5	30
1,1,2,2-Tetrachloroethane(sim)	1.694	1.466		13.5	30
Benzyl chloride(sim)	1.784	1.744		2.2	30
1,3-Dichlorobenzene(sim)	1.551	1.413		8.9	30
1,4-Dichlorobenzene(sim)	1.651	1.575		4.6	30
sec-Butylbenzene(sim)	3.228	2.998		7.1	30
4-Isopropyltoluene(sim)	2.873	2.721		5.3	30
1,2-Dichlorobenzene(sim)	1.288	1.129		12.3	30
n-Butylbenzene(sim)	2.259	2.197		2.7	30
1,2,4-Trichlorobenzene(sim)	0.509	0.455		10.6	30
Hexachlorobutadiene(sim)	0.902	0.816		9.5	30
% Bromofluorobenzene	1.413	1.401		0.8	30

(\*) Recommended RRF not met   (+) %D exceeds criteria %   (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

**8A**  
**AIR INTERNAL STANDARD AREA AND RT SUMMARY**  
**Full Scan**

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ61984  
Lab Method / File Id: 24AIR\_1012.M / 1020\_02.D Date Analyzed: 10/20/21  
Instrument ID: CHEM24 Time Analyzed: 14:19  
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## FORM VIII VOA

8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Sim Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
 Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ61984  
 Lab Method / File Id: 24AIR\_1012.M / 1020\_02.D Date Analyzed: 10/20/21  
 Instrument ID: CHEM24 Time Analyzed: 14:19  
 GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #			LAB FILE ID
REFERENCE STD	373864	5.17	1218296	7.13	629493	10.73			1020_02.D
UPPER LIMIT	525279	5.50	1711706	7.46	884438	11.06			1020_02.D
LOWER LIMIT	222449	4.84	724886	6.80	374548	10.40			1020_02.D
CLIENT ID									
01 CCAL 1	373864	5.17	1218296	7.13	629493	10.73			1020_02.D
02 CJ60437 LCS	382548	5.17	1227485	7.13	642780	10.73			1020_04.D
03 CJ60437 BLANK	369714	5.17	1203927	7.13	621067	10.73			1020_06.D
04 CJ60437 QC	367803	5.17	1201696	7.13	688507	10.73			1020_10.D
05 60437 dup	403206	5.17	1292793	7.13	696683	10.73			1020_11.D
06 IA-1	322884	5.16	1057680	7.12	554282	10.73			1020_21.D
07 OA-1	331780	5.17	1081800	7.13	547544	10.73			1020_22.D
08									
09							same as full	same as full	
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

FORM VIII VOA

# Injection Log

Data Directory: H:\AIR2021\CHEM4\100CT\20\

Line	V1	FileName	SampleName	MscInfo	Injection Time
1)	0	1020_07.D	xxxxxxxxxxxx		N/A
2)	0	1022_03.D	xxxxxxxxxxxx		N/A
3)	31	1020_01.D	xxxxxxxxxxxx		10/20/21 13:46
4)	32	1020_02.D	BFB TUNE - CCAL 1	1ppb cCal ; air34b ;	10/20/21 14:19
5)	33	1020_03.D	xxxxxxxxxxxx	CJ60437 LCS	10/20/21 14:53
6)	34	1020_04.D	CJ60437 LCS	CJ60437 BLANK	10/20/21 15:29
7)	35	1020_05.D	xxxxxxxxxxxx	CJ60437 QC	10/20/21 16:00
8)	36	1020_06.D	CJ60437 BLANK	CJ60437 DUP	10/20/21 16:31
9)	37	1020_10.D	CJ60437 QC		10/20/21 19:00
10)	38	1020_11.D	60437 dup		10/20/21 19:36
11)	39	1020_12.D	xxxxxxxxxxxx		10/20/21 20:13
12)	40	1020_13.D	xxxxxxxxxxxx		10/20/21 20:54
13)	41	1020_14.D	xxxxxxxxxxxx		10/20/21 21:26
14)	42	1020_15.D	xxxxxxxxxxxx		10/20/21 21:59
15)	43	1020_16.D	xxxxxxxxxxxx		10/20/21 22:31
16)	44	1020_17.D	xxxxxxxxxxxx		10/20/21 23:04
17)	45	1020_18.D	xxxxxxxxxxxx		10/20/21 23:40
18)	46	1020_19.D	xxxxxxxxxxxx		10/21/21 0:21
19)	47	1020_20.D	xxxxxxxxxxxx		10/21/21 1:03
20)	48	1020_21.D	IA-1	CJ61984	10/21/21 3:09
21)	49	1020_22.D	OA-1	CJ61985	10/21/21 3:45
22)	50	1020_23.D	xxxxxxxxxxxx		10/21/21 4:17
23)	51	1020_24.D	xxxxxxxxxxxx		10/21/21 4:49
24)	52	1020_25.D	xxxxxxxxxxxx		10/21/21 5:22
25)	53	1020_26.D	xxxxxxxxxxxx		10/21/21 8:44
26)	54	1020_27.D	xxxxxxxxxxxx		10/21/21 9:20
27)	55	1020_28.D	xxxxxxxxxxxx		10/21/21 9:56
28)	56	1020_29.D	xxxxxxxxxxxx		10/21/21 10:33
29)	57	1020_30.D	xxxxxxxxxxxx		10/21/21 11:09
30)	1	1021_01.D	xxxxxxxxxxxx		10/21/21 11:40
31)	2	1021_02.D	xxxxxxxxxxxx		10/21/21 12:13
32)	3	1021_03.D	xxxxxxxxxxxx		10/21/21 12:46
33)	4	1021_04.D	xxxxxxxxxxxx		10/21/21 13:22
34)	5	1021_05.D	xxxxxxxxxxxx		10/21/21 13:53
35)	6	1021_06.D	xxxxxxxxxxxx		10/21/21 14:24
36)	7	1021_07.D	xxxxxxxxxxxx		10/21/21 14:57
37)	7	1021_08.D	xxxxxxxxxxxx		10/21/21 15:33
38)	8	1021_09.D	xxxxxxxxxxxx		10/21/21 16:10
39)	9	1021_10.D	xxxxxxxxxxxx		10/21/21 16:46
40)	10	1021_11.D	xxxxxxxxxxxx		10/21/21 17:22
41)	11	1021_12.D	xxxxxxxxxxxx		10/21/21 17:59
42)	12	1021_13.D	xxxxxxxxxxxx		10/21/21 18:35
43)	13	1021_14.D	xxxxxxxxxxxx		10/21/21 19:11
44)	14	1021_15.D	xxxxxxxxxxxx		10/21/21 19:48
45)	15	1021_16.D	xxxxxxxxxxxx		10/21/21 20:24
46)	16	1021_17.D	xxxxxxxxxxxx		10/21/21 21:00
47)	17	1021_18.D	xxxxxxxxxxxx		10/21/21 21:37
48)	18	1021_19.D	xxxxxxxxxxxx		10/21/21 22:13
49)	19	1021_20.D	xxxxxxxxxxxx		10/21/21 23:00
50)	20	1021_21.D	xxxxxxxxxxxx		10/21/21 23:41
51)	21	1021_22.D	xxxxxxxxxxxx		10/22/21 1:03
52)	22	1021_23.D	xxxxxxxxxxxx		10/22/21 1:39
53)	23	1021_24.D	xxxxxxxxxxxx		10/22/21 2:11
54)	24	1021_25.D	xxxxxxxxxxxx		10/22/21 2:44
55)	25	1021_26.D	xxxxxxxxxxxx		10/22/21 3:16
56)	26	1021_27.D	xxxxxxxxxxxx		10/22/21 7:28
57)	27	1021_28.D	xxxxxxxxxxxx		10/22/21 7:59
58)	36	1021_29.D	xxxxxxxxxxxx		10/22/21 9:14
59)	37	1021_30.D	xxxxxxxxxxxx		10/22/21 10:19
60)	38	1021_31.D	xxxxxxxxxxxx		10/22/21 10:51
61)	39	1022_01.D	xxxxxxxxxxxx		10/22/21 11:24
62)	40	1022_02.D	xxxxxxxxxxxx		10/22/21 12:17

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CANISTER BLK 2276
SDG No.:	GCJ61984	Lab Sample ID:	CANISTER BLK 2276	
Canister:	CANBL	Lab File ID:	1008_13.D	
Instrument:	CHEM24	Column:		
Purge Volume	200 (cc)	Date Analyzed:	10/08/21	
Matrix:	AIR	Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.202	U	0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.421	U	0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.863	U	0.863	0.863	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-42-5	Styrene	0.235	U	0.235	0.235	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.204	U	0.204	0.204	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
71-43-2	Benzene(sim)	0.313	U	0.313	0.313	r
56-23-5	Carbon Tetrachloride(sim)	0.032	U	0.032	0.032	r
75-35-4	1,1-Dichloroethene(sim)	0.051	U	0.051	0.051	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

## CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ61984	Lab Sample ID:	CANISTER BLK 2276
Canister:	CANBL	Lab File ID:	1008_13.D
Instrument:	CHEM24	Column:	
Purge Volume	200	(cc)	Date Analyzed: 10/08/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

# Injection Log

Data Directory: H:\AIR2021\CHEM4\100CT\08\

Line	V1	FileName	SampleName	MscInfo	Injection Time
1)	0	1008_15.D	xxxxxxxxxxxx		N/A
2)	0	1008_07.D	xxxxxxxxxxxx		N/A
3)	31	1008_01.D	xxxxxxxxxxxx		10/08/21 10:06
4)	32	1008_02.D	xxxxxxxxxxxx		10/08/21 10:40
5)	32	1008_03.D	xxxxxxxxxxxx		10/08/21 11:13
6)	33	1008_04.D	xxxxxxxxxxxx		10/08/21 11:47
7)	34	1008_05.D	xxxxxxxxxxxx		10/08/21 12:24
8)	35	1008_06.D	xxxxxxxxxxxx		10/08/21 14:14
9)	37	1008_08.D	xxxxxxxxxxxx		10/08/21 16:08
10)	38	1008_09.D	xxxxxxxxxxxx		10/08/21 16:44
11)	39	1008_10.D	xxxxxxxxxxxx		10/08/21 17:21
12)	40	1008_11.D	xxxxxxxxxxxx		10/08/21 17:57
13)	41	1008_12.D	xxxxxxxxxxxx		10/08/21 18:34
14)	42	1008_13.D	CANISTER BLK 2276	CANISTER BLK 2276	10/08/21 19:10
15)	43	1008_14.D	xxxxxxxxxxxx		10/08/21 19:47
16)	44	1008_16.D	xxxxxxxxxxxx		10/08/21 21:22
17)	45	1008_17.D	xxxxxxxxxxxx		10/08/21 21:54
18)	46	1008_18.D	xxxxxxxxxxxx		10/08/21 22:27
19)	47	1008_19.D	xxxxxxxxxxxx		10/08/21 22:59
20)	48	1008_20.D	xxxxxxxxxxxx		10/08/21 23:33
21)	49	1008_21.D	xxxxxxxxxxxx		10/09/21 0:05
22)	50	1008_22.D	xxxxxxxxxxxx		10/09/21 0:38
23)	51	1008_23.D	xxxxxxxxxxxx		10/09/21 1:19
24)	52	1008_24.D	xxxxxxxxxxxx		10/09/21 2:01
25)	53	1008_25.D	xxxxxxxxxxxx		10/09/21 2:43
26)	54	1008_26.D	xxxxxxxxxxxx		10/09/21 3:31
27)	55	1008_27.D	xxxxxxxxxxxx		10/09/21 4:12
28)	56	1008_28.D	xxxxxxxxxxxx		10/09/21 4:54
29)	57	1008_29.D	xxxxxxxxxxxx		10/09/21 5:28
30)	58	1008_30.D	xxxxxxxxxxxx		10/09/21 6:01
31)	59	1008_31.D	xxxxxxxxxxxx		10/09/21 6:35

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

IA-1

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ61984	Lab Sample ID:	CJ61984
Canister:	28553	Lab File ID:	1020_21.D
Instrument:	CHEM24	Column:	RTX-VMS
Purge Volume	200 (cc)	Date Analyzed:	10/21/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	2.76		0.202	0.202	r
74-87-3	Chloromethane	1.18	o	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	282	ES	0.531	0.531	r
67-64-1	Acetone	26.2	S	0.421	0.421	r
75-69-4	Trichlorofluoromethane	0.307		0.178	0.178	r
67-63-0	Isopropylalcohol	18.0	S	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.944	S	0.864	0.864	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	4.91		0.339	0.339	r
110-54-3	Hexane	8.96	S	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
107-06-2	1,2-Dichloroethane	0.682		0.247	0.247	r
71-43-2	Benzene	6.34		0.313	0.313	r
110-82-7	Cyclohexane	3.84		0.291	0.291	r
142-82-5	Heptane	3.40	o	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.221	U	0.221	0.221	r
108-88-3	Toluene	16.2		0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
127-18-4	Tetrachloroethene	0.262		0.037	0.037	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-41-4	Ethylbenzene	5.55		0.230	0.230	r
179601-23-1	m,p-Xylene	24.3		0.230	0.230	r
100-42-5	Styrene	0.823	o	0.235	0.235	r
95-47-6	o-Xylene	6.46	o	0.230	0.230	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	1.93		0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.698		0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	2.38		0.204	0.204	r
106-46-7	1,4-Dichlorobenzene	19.1		0.166	0.166	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Client:	<u>GZA-NY</u>	Lab:	<u>Phoenix Env. Labs</u>
SDG No.:	<u>GCJ61984</u>	Lab Sample ID:	<u>CJ61984</u>
Canister:	<u>28553</u>	Lab File ID:	<u>1020_21.D</u>
Instrument:	<u>CHEM24</u>	Column:	<u>RTX-VMS</u>
Purge Volume	<u>200</u>	(cc)	Date Analyzed: <u>10/21/21</u>
Matrix:	<u>AIR</u>	Dilution Factor:	<u>1</u>

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM24\100CT\20\  
 Data File : 1020\_21.D  
 Acq On : 21 Oct 2021 3:09 am ✓  
 Operator : Keith  
 Client ID : IA-1  
 Lab ID : CJ61984  
 ALS Vial : 48 Sample Multiplier: 1

Quant Time: Oct 21 09:45:41 2021  
 Quant Method : H:\AIR2021\CHEM24\METHODS\24AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 Last Update : Tue Oct 19 10:07:56 2021  
 Response via : Initial Calibration

Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	5.161	130	300523	10.000	ng	0.00
36) 1, 4-Difluorobenzene	7.121	114	1057680	10.000	ng	0.00
53) Chlorobenzene-d5	10.726	82	554282	10.000	ng	0.00
80) Bromochloromethane(sim)	5.164	130	322884	10.000	ng	# 0.00
95) 1, 4-Difluorobenzene(sim)	7.121	114	1057680	10.000	ng	0.00
105) Chlorobenzene-d5(sim)	10.726	82	554282	10.000	ng	0.00
<b>System Monitoring Compounds</b>						
62) % Bromofluorobenzene	12.201	95	788005	10.060	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	= 100.60%	
<b>Target Compounds</b>						
3) Dichlorodifluoromethane	1.527	85	207344	2.759	ppbv	100
4) Chloromethane	1.651	50	47983	1.180	ppbv	80
10) Ethanol	2.630	45	2993305	281.669	ppbv#	92
12) Acetone	3.211	43	1452845	26.240	ppbv	94
13) Trichlorofluoromethane	2.185	101	25193	0.307	ppbv#	96
14) Isopropyl alcohol	3.307	45	1094235	17.981	ppbv	98
17) Methylene Chloride	3.136	49	42179	0.944	ppbv	97
25) Methyl Ethyl Ketone	5.839	43	359487	4.908	ppbv	96
27) Hexane	3.485	57	413410	8.959	ppbv	91
31) 1, 2-Dichloroethane	6.457	62	33824	0.682	ppbv	100
33) Benzene	6.190	78	452757	6.335	ppbv	96
34) Carbon Tetrachloride	5.557	117	7059	0.088	ppbv	90
35) Cyclohexane	5.233	56	182924	3.839	ppbv	90
39) Trichloroethene	7.052	130	3569	0.087	ppbv	86
43) Heptane	6.354	43	221589	3.401	ppbv	95
48) Toluene	8.942	91	1468297	16.233	ppbv	99
52) Tetrachloroethene	9.426	166	14305	0.262	ppbv	96
56) Ethylbenzene	10.836	91	732127	5.549	ppbv	99
57) m,p-Xylene	11.021	91	2434024	24.274	ppbv	98
59) Styrene	11.570	104	62972	0.823	ppbv	94
61) o-Xylene	11.515	91	782836	6.460	ppbv	93
66) 4-Ethyltoluene	12.544	105	285933	1.932	ppbv#	94
67) 1, 3, 5-Trimethylbenzene	12.674	105	86535	0.698	ppbv	98
68) 1, 2, 4-Trimethylbenzene	13.135	105	298241	2.380	ppbv	99
72) 1, 4-Dichlorobenzene	13.557	146	1519150	19.125	ppbv	99
74) 4-Isopropyltoluene	13.453	119	37589	0.254	ppbv#	89
84) Trichlorofluoromethane...	2.181	101	27178	0.315	ppbv	99
86) Benzene(sim)	6.192	78	504641	6.215	ppbv	96
87) Carbon Tetrachloride(sim)	5.557	117	6930	0.086	ppbv	89
94) 1, 2-Dichloroethane(sim)	6.453	62	36248	0.696	ppbv	99
98) Trichloroethene(sim)	7.069	130	3341	0.082	ppbv	99
104) Tetrachloroethene(sim)	9.429	166	15931	0.289	ppbv	98
108) Ethylbenzene(sim)	10.832	91	812886	5.766	ppb	99
109) m,p-Xylene(sim)	11.021	91	2434024	23.836	ppbv	98
110) o-Xylene(sim)	11.511	91	857488	6.302	ppb #	91
116) 1, 4-Dichlorobenzene(sim)	13.553	146	1775024	19.393	ppbv	100
118) 4-Isopropyltoluene(sim)	13.456	119	36093	0.227	ppbv#	80

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

OA-1	
------	---

Client: GZA-NY Lab: Phoenix Env. Labs

SDG No.: GCJ61984 Lab Sample ID: CJ61985

Canister: 19732 Lab File ID: 1020\_22.D

Instrument: CHEM24 Column: RTX-VMS Date Received: 10/20/21

Purge Volume 200 (cc) Date Analyzed: 10/21/21 

Matrix: AIR Dilution Factor: 1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.549		0.202	0.202	r
74-87-3	Chloromethane	0.492		0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	12.7	S	0.531	0.531	r
67-64-1	Acetone	4.10	S	0.421	0.421	r
75-69-4	Trichlorofluoromethane	0.253		0.178	0.178	r
67-63-0	Isopropylalcohol	2.21	S	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.864	U	0.864	0.864	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.880	O	0.339	0.339	r
110-54-3	Hexane	0.327	S	0.284	0.284	r
141-78-6	Ethyl acetate	0.308		0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
71-43-2	Benzene	0.313	U	0.313	0.313	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.221	U	0.221	0.221	r
108-88-3	Toluene	0.485		0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-42-5	Styrene	0.235	U	0.235	0.235	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.204	U	0.204	0.204	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
56-23-5	Carbon Tetrachloride(sim)	0.082	O	0.032	0.032	r
75-35-4	1,1-Dichloroethene(sim)	0.051	U	0.051	0.051	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1 AIR ANALYSIS DATA SHEET

**CLIENT ID**

1

Client:	<u>GZA-NY</u>	Lab:	<u>Phoenix Env. Labs</u>	QA-T
SDG No.:	<u>GCJ61984</u>	Lab Sample ID:	<u>CJ61985</u>	
Canister:	<u>19732</u>	Lab File ID:	<u>1020_22.D</u>	
Instrument:	<u>CHEM24</u>	Column:	<u>RTX-VMS</u>	Date Received: <u>10/20/21</u>
Purge Volume	<u>200</u> (cc)			Date Analyzed: <u>10/21/21</u>
Matrix:	AIR	Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

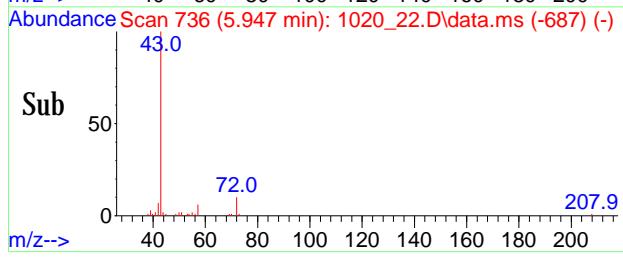
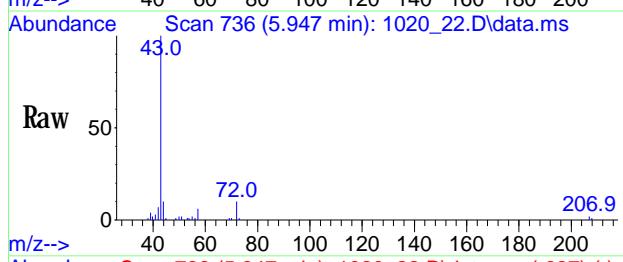
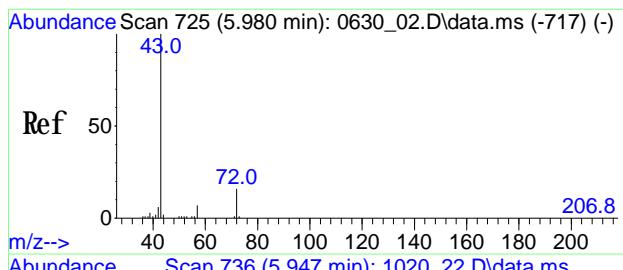
## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM24\100CT\20\  
 Data File : 1020\_22.D  
 Acq On : 21 Oct 2021 3:45 am  
 Operator : Keith  
 Client ID : OA-1  
 Lab ID : CJ61985  
 ALS Vial : 49 Sample Multiplier: 1

Quant Time: Oct 21 09:46:11 2021  
 Quant Method : H:\AIR2021\CHEM24\METHODS\24AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 QLast Update : Tue Oct 19 10:07:56 2021  
 Response via : Initial Calibration

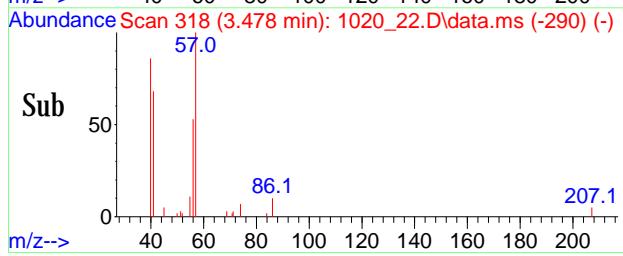
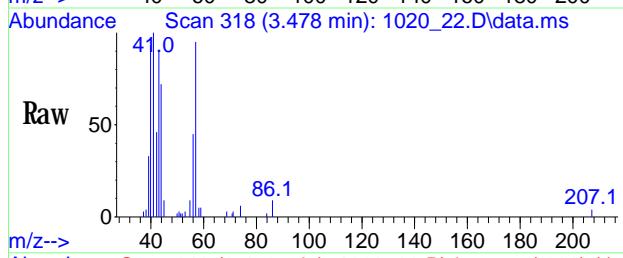
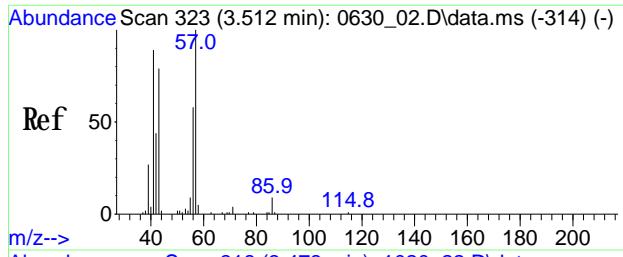
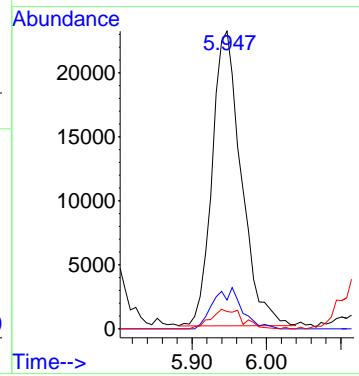
Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	5.161	130	313129	10.000	ng	0.00
36) 1, 4-Difluorobenzene	7.128	114	1081800	10.000	ng	0.00
53) Chlorobenzene-d5	10.726	82	547544	10.000	ng	0.00
80) Bromochloromethane(sim)	5.171	130	331780	10.000	ng	# 0.00
95) 1, 4-Difluorobenzene(sim)	7.128	114	1081800	10.000	ng	0.00
105) Chlorobenzene-d5(sim)	10.726	82	547544	10.000	ng	0.00
<b>System Monitoring Compounds</b>						
62) % Bromofluorobenzene	12.201	95	763005	9.861	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	= 98.60%	
<b>Target Compounds</b>						
3) Dichlorodifluoromethane	1.528	85	43016	0.549	ppbv	99
4) Chloromethane	1.658	50	20829	0.492	ppbv	84
10) Ethanol	2.705	45	141098	12.743	ppbv#	92
12) Acetone	3.294	43	236435	4.098	ppbv	97
13) Trichlorofluoromethane	2.185	101	21572	0.253	ppbv	98
14) Isopropyl alcohol	3.389	45	140389	2.214	ppbv	95
25) Methyl Ethyl Ketone	5.947	43	67179	0.880	ppbv	98
27) Hexane	3.478	57	15740	0.327	ppbv#	56
29) Ethyl acetate	5.774	43	30217	0.308	ppbv#	98
34) Carbon Tetrachloride	5.558	117	6760	0.081	ppbv	98
39) Trichloroethene	7.066	130	2030	0.048	ppbv#	74
48) Toluene	8.950	91	44910	0.485	ppbv	97
57) m,p-Xylene	11.021	91	25921	0.262	ppbv	97
84) Trichlorofluoromethane(sim)	2.181	101	22559	0.254	ppbv	100
87) Carbon Tetrachloride(sim)	5.558	117	6760	0.082	ppbv	97
98) Trichloroethene(sim)	7.069	130	1640	0.039	ppbv	96
109) m,p-Xylene(sim)	11.021	91	25921	0.257	ppbv	98

(#)out of range (m)manual integration reviewed by analyst (+)signals summed



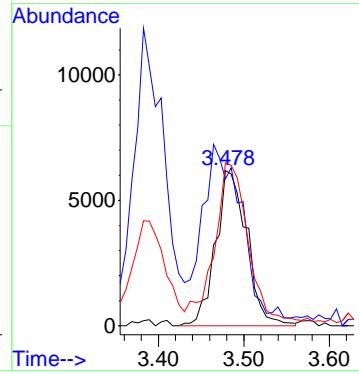
#25  
Methyl Ethyl Ketone  
Conc: 8\$ 0.880 ppbv  
RT: 5.947 min Scan# 736  
Delta R.T. 0.051 min  
Lab File: 1020\_22.D  
Acq: 21 Oct 2021 3:45 am

Tgt Ion: 43 Resp: 67179  
Ion Ratio Lower Upper  
43 100  
72 14.1 11.7 17.5  
57 7.5 5.2 7.8



#27  
Hexane  
Conc: 8\$ 0.327 ppbv  
RT: 3.478 min Scan# 318  
Delta R.T. -0.007 min  
Lab File: 1020\_22.D  
Acq: 21 Oct 2021 3:45 am

Tgt Ion: 57 Resp: 15740  
Ion Ratio Lower Upper  
57 100  
43 135.9 58.0 87.0#  
41 108.4 72.9 109.3



N - out of criteria ratio

**D. SAMPLE DELIVERY GROUP GCJ63992**

## ORGANIC ANALYSIS SUPPORT DOCUMENTATION

Client Name: GZA GeoEnvironmental of New York  
 Site/Project Name: 2022 DUSR BCP Bronx  
 Job Number/Task/Subtask: PROJ-021403 Ambient/Indoor Air Report  
 Laboratory/Location: Phoenix Inc.  
 SDG: GCJ63992  
 Sample Collection Dates: 10/22/21

EnvStd Project Manager: STZ  
 Reviewed by: JAB  
 Approved by: STZ  
 Completion Date: 10/26/22  
 Validation Level: 4

The following table indicates criteria that were examined, the identified problems, and support documentation attachments.

Parameter/ Method	Criteria Examined in Detail							Problems Identified													
	Note: All items examined have been included in the Support Document unless otherwise noted.																				
	Check (✓) if Yes or Footnote Letter for Comments Below																				
	TO-15								TO-15												
Condition upon Receipt	X																				
Sample Preservation	X																				
Holding Times	X																				
Blank Analysis Results	X																				
Surrogates	X																				
Laboratory Control Sample	X																				
Matrix Spike/Matrix Spike Duplicate																					
Laboratory Duplicate	X																				
Field Duplicate																					
Sample Preparation	X																				
Detection Limit/Sensitivity	X																				
Mass Tuning	X																				
GC Instrument Performance – Resolution Checks and DDT/Endrin Breakdown																					
Initial Calibrations	X																				
Continuing Calibrations	X								X												
Internal Standard Performance	X																				
Retention Time Shifts	X																				
Quantitation of Results	X																				
Qualitative Identification: Targets	X								X												
Qualitative Identification: TICs																					
Multiple Dilutions/Analyses																					
Analytical Sequence	X																				
GC Column Agreement																					
Manual Integration																					
Percent Solids																					
Extract Cleanup Documentation, Checks, and Calibrations																					
Deliverable was Complete	X								X												
Others:																					

**Comments:** Qualitative Identification, Quantitation of Results, and Manual Integrations are not included in the Support Documentation unless a problem was identified.



## BLANK ANALYSIS RESULTS FOR ORGANIC PARAMETERS

1 - V = Volatile; S = Semivolatile; P = Pesticide/PCB; O = Other:

2 - MB = Method Blank; TB = Trip Blank; EB = Equipment Blank; FB = Field Blank;  
IB = Instrument Blank; SB = Storage Blank

## Notes:

2C  
AIR SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No.:  SDG: GCJ63992

QC Batch Id: 597799 QC Sample Id: CJ63030

CLIENT ID	LAB ID	SMC1 BFB #				TOT OUT
01 CJ63030 LCS	CJ63030 LCS	96				0
02 CJ63030 BLANK	CJ63030 BLANK	98				0
03 CJ63030 QC	CJ63030 QC	101				0
04 63030 dup	CJ63030 DUP	100				0
05 SV-1 5X	CJ63992 5X	98				0
06 SV-2 5X	CJ63993 5X	100				0
07 SV-3 5X	CJ63994 5X	101				0
08						
09						
10						
11						
12						
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26						
27						
28						
29						
30						

SMC1      BFB

Bromofluorobenzene

QC LIMITS  
(70-130)

# Column to be used to flag recovery values  
 \* Values outside of contract required QC limits  
 D Surrogate diluted out

FORM II AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No:  SAS No:  SDG No GCJ63992

LCS - Client Id: CJ63030 LCS

COMPOUND	SPIKE ADDED (ppbv)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Propylene	10	12.04	120	70 130
Dichlorodifluoromethane	10	11.73	117	70 130
Chloromethane	10	12.44	124	70 130
1,2-Dichlorotetrafluoroethane	10	11.35	114	70 130
Vinyl Chloride	10	11.15	112	70 130
1,3-Butadiene	10	10.87	109	70 130
Bromomethane	10	9.579	96	70 130
Chloroethane	10	9.761	98	70 130
Ethanol	5	5.449	109	70 130
Acetone	10	11.38	114	70 130
Trichlorofluoromethane	10	11.48	115	70 130
Isopropylalcohol	7	6.442	92	70 130
Acrylonitrile	10	9.965	100	70 130
1,1-Dichloroethene	10	11.46	115	70 130
Methylene Chloride	10	10.15	102	70 130
Carbon Disulfide	10	9.580	96	70 130
Trichlorotrifluoroethane	10	10.19	102	70 130
Trans-1,2-Dichloroethene	10	10.19	102	70 130
1,1-Dichloroethane	10	10.20	102	70 130
Methyl tert-butyl ether(MTBE)	10	10.04	100	70 130
Methyl Ethyl Ketone	10	10.50	105	70 130
Cis-1,2-Dichloroethene	10	7.185	72	70 130
Hexane	10	10.38	104	70 130
Chloroform	10	10.14	101	70 130
Ethyl acetate	10	11.10	111	70 130
Tetrahydrofuran	10	10.32	103	70 130
1,2-Dichloroethane	10	11.50	115	70 130
1,1,1-Trichloroethane	10	10.86	109	70 130
Benzene	10	9.311	93	70 130
Carbon Tetrachloride	10	11.33	113	70 130
Cyclohexane	10	11.22	112	70 130
1,2-dichloropropane	10	9.448	94	70 130
Bromodichloromethane	10	10.19	102	70 130
Trichloroethene	10	10.06	101	70 130
1,4-Dioxane	10	7.917	79	70 130
Heptane	10	10.65	107	70 130
cis-1,3-Dichloropropene	10	9.803	98	70 130
4-Methyl-2-pentanone(MIBK)	10	9.634	96	70 130
trans-1,3-Dichloropropene	10	9.442	94	70 130
1,1,2-Trichloroethane	10	9.539	95	70 130
Toluene	10	9.775	98	70 130
Dibromochloromethane	10	10.23	102	70 130
2-Hexanone(MBK)	10	9.643	96	70 130
1,2-Dibromoethane(EDB)	10	9.497	95	70 130

FORM III AIR

3  
AIR LCS RECOVERY

Lab Name: Phoenix Environmental Labs Client: GZA-NY

Lab Code: Phoenix Case No: SAS No: SDG No GCJ63992

LCS - Client Id: CJ63030 LCS

FORM III AIR

4A  
AIR METHOD BLANK SUMMARY

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Client ID

CJ63030 BLANK

Lab Code: Phoenix Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63992

Lab File ID: 1022\_06.D

Lab Sample ID:

CJ63030 BLK

Date Analyzed: 10/22/2021

Time Analyzed:

13:20

GC Column: RTX-1 60M

Lab Batch ID:

597799

Instrument ID: CHEM20

Heated Purge:(Y/N)

Y

THIS METHOD BLANK APPLIES TO THE FOLLOWING QC AND FIELD SAMPLES:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01 CJ63030 LCS	CJ63030 LCS	1022_04.D	12:13
02 CJ63030 QC	CJ63030	1022_07.D	14:28
03 63030 dup	CJ63030 DUP	1022_08.D	15:10
04 SV-1 5X	CJ63992 5X	1022_23.D	00:16
05 SV-2 5X	CJ63993 5X	1022_24.D	00:52
06 SV-3 5X	CJ63994 5X	1022_25.D	01:29
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

COMMENTS: \_\_\_\_\_

FORM IV AIR

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CJ63030 BLANK
SDG No.:	GCJ63992	Lab Sample ID:	CJ63030 BL	
Canister:	BL	Lab File ID:	1022_06.D	
Instrument:	CHEM20	Column:	RTX-1 60M	Date Received: 10/21/21
Purge Volume	200	(cc)		Date Analyzed: 10/22/21
Matrix:	AIR		Dilution Factor: 1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.580	U	0.580	0.580	r
75-71-8	Dichlorodifluoromethane	0.200	U	0.200	0.200	r
74-87-3	Chloromethane	0.480	U	0.480	0.480	r
106-99-0	1,3-Butadiene	0.450	U	0.450	0.450	r
75-00-3	Chloroethane	0.380	U	0.380	0.380	r
64-17-5	Ethanol	0.530	U	0.530	0.530	r
67-64-1	Acetone	0.420	U	0.420	0.420	r
67-63-0	Isopropylalcohol	0.410	U	0.410	0.410	r
107-13-1	Acrylonitrile	0.460	U	0.460	0.460	r
75-09-2	Methylene Chloride	0.860	U	0.860	0.860	r
75-15-0	Carbon Disulfide	0.320	U	0.320	0.320	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.280	U	0.280	0.280	r
78-93-3	Methyl Ethyl Ketone	0.340	U	0.340	0.340	r
110-54-3	Hexane	0.280	U	0.280	0.280	r
141-78-6	Ethyl acetate	0.280	U	0.280	0.280	r
109-99-9	Tetrahydrofuran	0.340	U	0.340	0.340	r
110-82-7	Cyclohexane	0.290	U	0.290	0.290	r
142-82-5	Heptane	0.240	U	0.240	0.240	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.240	U	0.240	0.240	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.270	U	0.270	0.270	r
591-78-6	2-Hexanone(MBK)	0.240	U	0.240	0.240	r
630-20-6	1,1,1,2-Tetrachloroethane	0.150	U	0.150	0.150	r
108-90-7	Chlorobenzene	0.220	U	0.220	0.220	r
100-41-4	Ethylbenzene	0.230	U	0.230	0.230	r
100-42-5	Styrene	0.230	U	0.230	0.230	r
95-47-6	o-Xylene	0.230	U	0.230	0.230	r
98-82-8	Isopropylbenzene	0.200	U	0.200	0.200	r
622-96-8	4-Ethyltoluene	0.200	U	0.200	0.200	r
108-67-8	1,3,5-Trimethylbenzene	0.200	U	0.200	0.200	r
95-63-6	1,2,4-Trimethylbenzene	0.200	U	0.200	0.200	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.140	U	0.140	0.140	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.260	U	0.260	0.260	r
75-69-4	Trichlorofluoromethane(sim)	0.180	U	0.180	0.180	r
107-06-2	1,2-Dichloroethane(sim)	0.250	U	0.250	0.250	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used L=Lab Solvent

1  
AIR ANALYSIS DATA SHEET

**CLIENT ID**

Client:	GZA-NY	Lab:	Phoenix Env. Labs	CJ63030 BLANK
SDG No.:	GCJ63992	Lab Sample ID:	CJ63030 BL	
Canister:	BL	Lab File ID:	1022_06.D	
Instrument:	CHEM20	Column:	RTX-1 60M	Date Received: 10/21/21
Purge Volume	200	(cc)	Date Analyzed: 10/22/21	
Matrix:	AIR	Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

5B  
AIR INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Validated in  
SDG  
GCJ63027

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63992

Lab File ID: 1012\_05.D

BFB Injection Date: 10/12/21

Instrument ID: CHEM20

BFB Injection Time: 18:46

GC Column: RTX-1 60M

Heated Purge: (Y/N) Y

AutoFind: Scans 780, 781, 782; Background Corrected with Scan 775

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.7
75	30.0 - 66.0% of mass 95	44.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 ( 0.0 )1
174	50.0 - 120.0% of mass 95	87.7
175	4.0 - 9.0% of mass 174	7.5 ( 6.6 )1
176	93.0 - 101.0% of mass 174	97.4 ( 85.4 )1
177	5.0 - 9.0% of mass 176	6.7 ( 5.7 )1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01	ICAL 0.02	1012_06.D	10/12/21	19:21	
02	ICAL 0.035	1012_07.D	10/12/21	19:56	
03	ICAL 0.05	1012_08.D	10/12/21	20:31	
04	ICAL 0.1	1012_09.D	10/12/21	21:07	
05	ICAL 0.2	1012_10.D	10/12/21	21:43	
06	ICAL 0.5	1012_11.D	10/13/21	00:55	
07	ICAL 2.5	1012_12.D	10/13/21	01:33	
08	ICAL 5	1012_13.D	10/13/21	02:08	
09	ICAL 25	1012_14.D	10/13/21	02:46	
10	ICAL 40	1012_15.D	10/13/21	03:25	
11	ICAL 1	1012_17.D	10/13/21	04:34	
12	ICAL 10	1012_18.D	10/13/21	05:11	
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

(\*) Outside 24 hr clock

FORM V AIR

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs  
 Lab Code: Phoenix  
 Instrument ID: CHEM20  
 Heated Purge (Y/N): Y  
 GC Column:

validated in SDG  
GCJ63027

Client: \_\_\_\_\_  
 SDG No.: GCJ63992  
 Calibration Date From: 10/12/21 21:43  
 Calibration Date Thru: 10/13/21 05:11  
 Method File: 20\_AIR\_1012.M

Laboratory File Ids

	RRF1 1012_06.D	RRF2 1012_07.D	RRF3 1012_08.D	RRF4 1012_09.D	RRF5 1012_10.D	RRF6 1012_11.D								
COMPOUND	RRF1 0.02	RRF2 0.035	RRF3 0.05	RRF4 0.1	RRF5 0.2	RRF6 0.5	RRF7 1	RRF8 2.5	RRF9 5	RRF10 10	RRF11 25	RRF12 40	— RRF	% RSD
Propylene					1.332	1.081	1.211	1.101	1.282	1.191	1.139	1.131	1.183	7.46
Dichlorodifluoromethane					2.540	2.285	2.392	2.295	2.610	2.500	2.354	2.312	2.411	5.12
Chloromethane					1.351	1.171	1.268	1.218	1.351	1.299	1.227	1.187	1.259	5.55
1,2-Dichlorotetrafluoroethane					2.395	2.090	2.319	2.207	2.436	2.346	2.221	2.193	2.276	5.15
Vinyl Chloride					1.014	0.937	1.018	0.973	1.092	1.024	0.974	0.985	1.002	4.63
1,3-Butadiene					1.187	1.020	0.985	0.907	1.045	1.001	0.960	0.952	1.007	8.36
Bromomethane					1.133	0.896	0.850	0.802	0.893	0.844	0.821	0.806	0.881	12.25
Chloroethane					0.618	0.446	0.472	0.416	0.435	0.424	0.411	0.415	0.455	15.16
Ethanol						0.628	0.558	0.522	0.586	0.548	0.501	0.473	0.545	9.58
Acetone					2.337	2.299	2.293	2.098	2.328	2.222	2.141	2.114	2.229	4.45
Trichlorofluoromethane					2.567	2.447	2.647	2.526	2.846	2.675	2.581	2.557	2.606	4.60
Isopropylalcohol					3.200	2.807	3.331	3.002	3.191	3.024	2.788	2.481	2.978	9.28
Acrylonitrile					0.977	1.101	1.191	0.977	1.113	1.024	1.016	1.030	1.054	7.11
1,1-Dichloroethene					1.905	1.770	1.944	1.866	2.060	2.189	2.101	2.107	1.993	7.18
Methylene Chloride					2.614	2.070	1.940	1.738	1.940	1.796	1.723	1.722	1.943	15.41
Carbon Disulfide					2.578	2.577	2.709	2.640	2.931	2.738	2.692	2.704	2.696	4.17
Trichlorotrifluoroethane					2.196	2.008	2.157	2.081	2.319	2.159	2.093	2.110	2.140	4.31
Trans-1,2-Dichloroethene					1.822	1.626	1.765	1.693	1.912	1.807	1.773	1.778	1.772	4.80
1,1-Dichloroethane					1.947	1.915	2.012	1.935	2.111	2.003	1.956	1.944	1.978	3.20
Methyl tert-butyl ether(MTBE)					2.851	2.351	2.706	2.427	2.681	2.559	2.459	2.458	2.561	6.64
Methyl Ethyl Ketone					3.637	2.995	3.003	2.935	3.349	3.164	3.135	3.391	3.201	7.52
Cis-1,2-Dichloroethene						1.367	1.379	1.414	1.314	1.314	1.464	1.511	1.395	5.30
Hexane					2.062	1.952	2.050	1.965	2.197	2.074	2.023	2.006	2.041	3.77
Chloroform					2.311	2.095	2.087	2.026	2.295	2.167	2.119	2.118	2.152	4.70
Ethyl acetate					0.406	0.382	0.462	0.430	0.451	0.437	0.417	0.419	0.425	5.96

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, q, qi, qfi, q2i, qfi2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ63992

Instrument ID: CHEM20

Calibration Date From: 10/12/21 21:43

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 05:11

GC Column: \_\_\_\_\_

Method File: 20\_AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_06.D</u>	<u>RRF2</u>	<u>1012_07.D</u>	<u>RRF3</u>	<u>1012_08.D</u>	<u>RRF4</u>	<u>1012_09.D</u>	<u>RRF5</u>	<u>1012_10.D</u>	<u>RRF6</u>	<u>1012_11.D</u>				
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD		
Tetrahydrofuran						1.997	1.706	1.801	1.719	1.976	1.862	1.817	1.803	1.835	5.81	
1,2-Dichloroethane						1.499	1.426	1.487	1.429	1.645	1.556	1.531	1.534	1.513	4.71	
1,1,1-Trichloroethane						2.456	2.129	2.262	2.147	2.428	2.302	2.240	2.241	2.276	5.19	
Benzene						2.921	3.103	2.845	2.804	3.423	2.978	3.215	2.919	3.026	6.91	
Carbon Tetrachloride						2.345	1.950	2.296	2.226	2.569	2.501	2.476	2.492	2.357	8.56	
Cyclohexane							1.373	1.475	1.339	1.536	1.437	1.398	1.381	1.420	4.77	
1,2-dichloropropane						0.374	0.359	0.370	0.353	0.400	0.371	0.359	0.358	0.368	4.03	
Bromodichloromethane						0.593	0.548	0.551	0.544	0.614	0.601	0.581	0.576	0.576	4.52	
Trichloroethene						0.373	0.355	0.389	0.375	0.421	0.404	0.383	0.368	0.383	5.49	
1,4-Dioxane						0.151	0.148	0.175	0.162	0.183	0.173	0.159	0.151	0.163	7.93	
Heptane						0.895	0.850	0.847	0.826	0.858	0.806	0.769	0.764	0.827	5.46	
cis-1,3-Dichloropropene						0.453	0.386	0.427	0.385	0.455	0.440	0.429	0.433	0.426	6.35	
4-Methyl-2-pentanone(MIBK)						1.325	1.062	1.105	1.065	1.175	1.091	1.009	1.017	1.106	9.28	
trans-1,3-Dichloropropene						0.419	0.349	0.384	0.339	0.400	0.392	0.379	0.389	0.381	6.89	
1,1,2-Trichloroethane						0.352	0.327	0.318	0.309	0.351	0.341	0.323	0.327	0.331	4.74	
Toluene						0.931	0.914	0.957	0.902	1.015	0.977	0.939	0.921	0.945	3.95	
Dibromochloromethane						0.610	0.546	0.607	0.561	0.660	0.651	0.640	0.644	0.615	6.88	
2-Hexanone(MBK)						0.690	0.826	0.894	0.874	1.006	0.960	0.930	0.926	0.888	10.89	
1,2-Dibromoethane(EDB)						0.463	0.447	0.501	0.460	0.543	0.514	0.508	0.511	0.493	6.72	
Tetrachloroethene						0.482	0.457	0.490	0.468	0.532	0.518	0.492	0.484	0.490	5.03	
1,1,1,2-Tetrachloroethane						1.083	1.012	1.017	0.970	1.038	1.010	0.856	0.806	0.974	9.71	
Chlorobenzene						1.566	1.558	1.675	1.533	1.690	1.594	1.381	1.314	1.539	8.55	
Ethylbenzene						2.905	2.673	2.715	2.722	2.615	2.823	2.654	2.301	2.169	2.620	9.07
m,p-Xylene						2.143	2.039	2.061	1.687	2.067	2.196	2.085	1.781	1.677	1.971	10.12
Bromoform						1.298	1.180	1.314	1.119	1.255	1.188	1.064	1.039	1.182	8.75	

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, q, qi, qfi, q2i, qf2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ63992

Instrument ID: CHEM20

Calibration Date From: 10/12/21 21:43

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 05:11

GC Column: \_\_\_\_\_

Method File: 20\_AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_06.D</u>	<u>RRF2</u>	<u>1012_07.D</u>	<u>RRF3</u>	<u>1012_08.D</u>	<u>RRF4</u>	<u>1012_09.D</u>	<u>RRF5</u>	<u>1012_10.D</u>	<u>RRF6</u>	<u>1012_11.D</u>			
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD	
Styrene						1.402	1.415	1.514	1.449	1.574	1.500	1.316	1.243	1.427	7.59
1,1,2,2-Tetrachloroethane						1.624	1.551	1.595	1.500	1.595	1.523	1.285	1.193	1.483	10.65
o-Xylene					2.361	2.251	2.136	2.243	2.124	2.252	2.140	1.800	1.682	2.110	10.61
Isopropylbenzene						3.129	2.916	3.018	2.957	3.101	2.990	2.553	2.354	2.877	9.59
4-Ethyltoluene						2.862	2.868	3.106	2.893	3.189	3.074	2.600	2.411	2.875	9.13
1,3,5-Trimethylbenzene						2.748	2.620	2.690	2.610	2.687	2.580	2.238	2.074	2.531	9.54
1,2,4-Trimethylbenzene						2.700	2.675	2.758	2.592	2.738	2.624	2.235	2.027	2.544	10.47
Benzyl chloride						5.487	5.359	5.662	5.488	5.876	5.586	4.628	4.186	5.284	10.87
1,3-Dichlorobenzene						1.206	1.253	1.499	1.372	1.563	1.547	1.289	1.203	1.367	11.07
1,4-Dichlorobenzene						0.990	1.062	1.241	1.216	1.373	1.402	1.182	1.114	1.197	11.97
sec-Butylbenzene						3.959	3.843	3.954	3.716	3.936	3.765	3.217	2.904	3.662	10.66
4-Isopropyltoluene						3.849	3.689	3.674	3.609	3.833	3.708	3.205	2.874	3.555	9.56
1,2-Dichlorobenzene						1.332	1.298	1.596	1.416	1.542	1.559	1.300	1.179	1.403	10.70
n-Butylbenzene						2.577	2.690	2.973	2.824	3.047	2.963	2.651	2.446	2.771	7.73
1,2,4-Trichlorobenzene	qfi					0.126	0.347	1.217	2.130	4.718	10.390	25.590	39.640	Coef R2	1.00
Hexachlorobutadiene						1.503	1.446	1.480	1.378	1.320	1.294	1.122	1.064	1.326	12.20
1,2-Dichlorotetrafluoroethane(sim)		2.806	2.563	2.690	2.243	2.087	1.886	2.081	1.975	2.168				2.278	14.43
Vinyl Chloride(sim)		1.381	1.235	1.135	1.024	0.991	0.910	0.997	0.953	1.042				1.074	14.03
Bromomethane(sim)		1.117	1.060	1.010	0.904	1.017	0.734	0.764	0.722	0.796				0.903	16.92
Trichlorofluoromethane(sim)		3.405	2.916	2.744	2.616	2.507	2.393	2.552	2.452	2.723				2.701	11.47
1,2-Dichloroethane(sim)		1.902	1.637	1.642	1.356	1.346	1.287	1.337	1.286	1.467				1.473	14.35
1,1,1-Trichloroethane(sim)		2.985	2.729	2.349	2.278	2.141	2.035	2.161	2.103	2.360				2.349	13.39
Benzene(sim)			3.259	3.038	3.154	2.623	2.801	2.558						2.905	9.92
Carbon Tetrachloride(sim)		2.586	2.371	2.329	2.125	2.061	1.908	2.215	2.153					2.218	9.40
1,1-Dichloroethene(sim)		2.256	2.079	2.018	1.862	1.710	1.598	1.748	1.679	1.836				1.865	11.48

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, qfi2, qf2, qf2i) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

SDG No.: GCJ63992

Instrument ID: CHEM20

Calibration Date From: 10/12/21 21:43

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 05:11

GC Column: \_\_\_\_\_

Method File: 20\_AIR\_1012.M

Laboratory File Ids

	<u>RRF1</u>	<u>1012_06.D</u>	<u>RRF2</u>	<u>1012_07.D</u>	<u>RRF3</u>	<u>1012_08.D</u>	<u>RRF4</u>	<u>1012_09.D</u>	<u>RRF5</u>	<u>1012_10.D</u>	<u>RRF6</u>	<u>1012_11.D</u>		
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	RRF9	RRF10	RRF11	RRF12	% RSD
		0.02	0.035	0.05	0.1	0.2	0.5	1	2.5	5	10	25	40	RRF
Trichlorotrifluoroethane(sim)		2.700	2.455	2.259	2.176	2.086	1.989	2.098	2.007	2.219				2.221 10.32
Trans-1,2-Dichloroethene(sim)		2.139	1.896	1.820	1.677	1.636	1.468	1.588	1.524	1.704				1.717 12.11
1,1-Dichloroethane(sim)		2.499	2.317	2.110	1.989	1.918	1.861	1.961	1.889	2.107				2.072 10.32
Cis-1,2-Dichloroethene(sim)		1.975	1.674	1.593	1.544	1.461	1.233	1.240	1.273	1.169				1.462 18.01
Chloroform(sim)		2.744	2.392	2.185	2.108	2.033	1.939	2.038	1.953	2.176				2.174 11.71
1,2-dichloropropane(sim)		0.548	0.472	0.433	0.417	0.389	0.374	0.396	0.384	0.436				0.428 12.76
Bromodichloromethane(sim)		0.724	0.665	0.642	0.665	0.594	0.548	0.552	0.545	0.614				0.617 10.15
Trichloroethene(sim)		0.570	0.511	0.473	0.447	0.433	0.410	0.435	0.416	0.471				0.463 11.05
1,4-Dioxane(sim)			0.177	0.123	0.181	0.155	0.148	0.175	0.162	0.183				0.163 12.48
cis-1,3-Dichloropropene(sim)		0.576	0.538	0.494	0.466	0.437	0.408	0.445	0.417					0.473 12.57
1,1,2-Trichloroethane(sim)		0.395	0.401	0.374	0.360	0.349	0.327	0.318	0.309	0.351				0.354 9.21
Dibromochloromethane(sim)		0.872	0.765	0.745	0.703	0.665	0.589	0.668	0.623					0.704 12.72
1,2-Dibromoethane(EDB)(sim)		0.703	0.574	0.564	0.522	0.460	0.447	0.501	0.460	0.543				0.530 15.02
Tetrachloroethene(sim)		0.745	0.662	0.627	0.597	0.572	0.545	0.579	0.553	0.626	0.607			0.611 9.70
Bromoform(sim)			1.842	1.658	1.547	1.494	1.402	1.333	1.498	1.304				1.510 11.72
m,p-Xylene(sim)			2.944	2.563	2.373	2.196	2.082	2.081	2.116	2.073	2.198			2.292 12.82
1,1,2,2-Tetrachloroethane(sim)			2.235	1.952	1.822	1.756	1.646	1.614	1.700	1.604	1.703			1.781 11.36
Benzyl chloride(sim)			1.483	1.332	1.371	1.257	1.187	1.297	1.581	1.435				1.368 9.35
1,3-Dichlorobenzene(sim)			1.733	1.569	1.468	1.376	1.357	1.383	1.689	1.581	1.802			1.551 10.69
1,4-Dichlorobenzene(sim)			1.513	1.415	1.180	1.208	0.990	1.062	1.241	1.216				1.228 13.89
sec-Butylbenzene(sim)			5.457	4.780	4.473	4.349	4.182	4.149	4.229	4.079	4.290			4.443 9.77
4-Isopropyltoluene(sim)			5.252	4.569	4.504	4.091	3.747	3.687	3.672	3.611	3.830			4.107 13.61
1,2-Dichlorobenzene(sim)			2.113	1.827	1.692	1.560	1.491	1.510	1.795	1.610	1.750			1.705 11.46
n-Butylbenzene(sim)				3.347	2.852	2.586	2.577	2.690	2.973	2.824				2.836 9.46
1,2,4-Trichlorobenzene(sim)	qfi	0.047	0.056	0.065	0.106	0.200	0.436	1.018						Coef R2 0.99

(#) The maximum %RSD was not met for this compound Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, qf2, qf2) display concentrations and not response factors

6B  
AIR INITIAL CALIBRATION DATA

Lab Name: Phoenix Environmental Labs

**Client:**

Lab Code: Phoenix

SDG No.: GCJ63992

Instrument ID: CHEM20

Calibration Date From: 10/12/21 21:43

Heated Purge (Y/N): Y

Calibration Date Thru: 10/13/21 05:11

### GC Column:

Method File: 20 AIR 1012.M

## Laboratory File Ids

(#) The maximum %RSD was not met for this compound

Note: m,p-xylene TV is 2 times the TV Listed

(l) linear (q) quadratic (i) inverse conc weight (i2) inverse conc weight squared (f) force through zero

Compounds not using average response (l, li, lfi, li2, lfi2, q, qi, qfi, q2, qfi2) display concentrations and not response factors

**8A**  
**AIR INTERNAL STANDARD AREA AND RT SUMMARY**  
**Full Scan**

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63992  
Lab Method / File Id: 20\_AIR\_1012.M / Average Date Analyzed: 10/13/21  
Instrument ID: CHEM20 Time Analyzed: 4:34  
GC Column: \_\_\_\_\_ ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

FORM VIII VOA

8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Sim Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63992  
Lab Method / File Id: 20\_AIR\_1012.M / Average Date Analyzed: 10/13/21  
Instrument ID: CHEM20 Time Analyzed: 4:34  
GC Column: ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS1 (DFM) = Difluoromethane

IS2 (BT-B) = 1,4-Dinitrobenzene

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

- \* Values outside of QC limits.

FORM VIII VOA

# Injection Log

Data Directory: H:\AIR2021\CHEM20\100CT\12\

Line	V1	FileName	SampleName	MscInfo	Injection Time
1)	0	1012_25.D	xxxxxxxxxxxx		N/A
2)	4	1012_01.D	xxxxxxxxxxxx		10/12/21 14:11
3)	5	1012_02.D	xxxxxxxxxxxx		10/12/21 17:04
4)	6	1012_03.D	xxxxxxxxxxxx		10/12/21 17:38
5)	7	1012_04.D	xxxxxxxxxxxx		10/12/21 18:12
6)	8	1012_05.D	BFB TUNE	0/0	10/12/21 18:46
7)	4	1012_06.D	ICAL 0.02	0.02	10/12/21 19:21
8)	3	1012_07.D	ICAL 0.035	0.035 ppb	10/12/21 19:56
9)	4	1012_08.D	ICAL 0.05	0.05 ppb	10/12/21 20:31
10)	5	1012_09.D	ICAL 0.1	0.10 ppb	10/12/21 21:07
11)	6	1012_10.D	ICAL 0.2	0.20 ppb	10/12/21 21:43
12)	7	1012_11.D	ICAL 0.5	0.50 ppb	10/13/21 0:55
13)	8	1012_12.D	ICAL 2.5	2.5 ppb	10/13/21 1:33
14)	9	1012_13.D	ICAL 5	5 ppb	10/13/21 2:08
15)	10	1012_14.D	ICAL 25	25 ppb	10/13/21 2:46
16)	11	1012_15.D	ICAL 40	40 ppb	10/13/21 3:25
17)	12	1012_16.D	xxxxxxxxxxxx		10/13/21 3:59
18)	13	1012_17.D	ICAL 1	1ppb cc	10/13/21 4:34
19)	14	1012_18.D	ICAL 10	10ppb	10/13/21 5:11
20)	15	1012_19.D	xxxxxxxxxxxx		10/13/21 5:48
21)	16	1012_20.D	xxxxxxxxxxxx		10/13/21 6:22
22)	17	1012_21.D	xxxxxxxxxxxx		10/13/21 6:56
23)	18	1012_22.D	xxxxxxxxxxxx		10/13/21 7:35
24)	19	1012_23.D	xxxxxxxxxxxx		10/13/21 8:16
25)	20	1012_24.D	xxxxxxxxxxxx		10/13/21 8:54
26)	22	1012_26.D	xxxxxxxxxxxx		10/13/21 9:35
27)	23	1012_27.D	xxxxxxxxxxxx		10/13/21 10:18
28)	24	1012_28.D	xxxxxxxxxxxx		10/13/21 12:11
29)	25	1012_29.D	xxxxxxxxxxxx		10/13/21 12:47
30)	26	1012_30.D	xxxxxxxxxxxx		10/13/21 13:23
31)	27	1012_31.D	xxxxxxxxxxxx		10/13/21 13:58
32)	28	1012_32.D	xxxxxxxxxxxx		10/13/21 14:55
33)	29	1012_33.D	xxxxxxxxxxxx		10/13/21 15:32
34)	30	1012_34.D	xxxxxxxxxxxx		10/13/21 16:08
35)	31	1012_35.D	xxxxxxxxxxxx		10/13/21 16:44
36)	32	1012_36.D	xxxxxxxxxxxx		10/13/21 17:25
37)	33	1012_37.D	xxxxxxxxxxxx		10/13/21 18:04
38)	34	1012_38.D	xxxxxxxxxxxx		10/13/21 18:44
39)	35	1012_39.D	xxxxxxxxxxxx		10/13/21 19:23
40)	36	1012_40.D	xxxxxxxxxxxx		10/13/21 20:53
41)	37	1012_41.D	xxxxxxxxxxxx		10/13/21 21:30
42)	38	1012_42.D	xxxxxxxxxxxx		10/13/21 22:06
43)	39	1012_43.D	xxxxxxxxxxxx		10/13/21 22:43
44)	40	1012_44.D	xxxxxxxxxxxx		10/13/21 23:19
45)	41	1012_45.D	xxxxxxxxxxxx		10/13/21 23:56
46)	42	1012_46.D	xxxxxxxxxxxx		10/14/21 0:32
47)	43	1012_47.D	xxxxxxxxxxxx		10/14/21 1:09
48)	44	1012_48.D	xxxxxxxxxxxx		10/14/21 1:49
49)	45	1012_49.D	xxxxxxxxxxxx		10/14/21 2:28
50)	46	1012_50.D	xxxxxxxxxxxx		10/14/21 3:01
51)	47	1014_01.D	xxxxxxxxxxxx		10/14/21 3:37
52)	48	1014_02.D	xxxxxxxxxxxx		10/14/21 4:13
53)	49	1014_03.D	xxxxxxxxxxxx		10/14/21 4:51
54)	50	1014_04.D	xxxxxxxxxxxx		10/14/21 5:25
55)	51	1014_05.D	xxxxxxxxxxxx		10/14/21 5:59
56)	52	1014_06.D	xxxxxxxxxxxx		10/14/21 6:37
57)	53	1014_07.D	xxxxxxxxxxxx		10/14/21 7:16
58)	54	1014_08.D	xxxxxxxxxxxx		10/14/21 7:55
59)	55	1014_09.D	xxxxxxxxxxxx		10/14/21 8:34
60)	56	1014_10.D	xxxxxxxxxxxx		10/14/21 9:13
61)	57	1014_11.D	xxxxxxxxxxxx		10/14/21 10:06
62)	58	1014_12.D	xxxxxxxxxxxx		10/14/21 10:42
63)	59	1014_13.D	xxxxxxxxxxxx		10/14/21 11:26
64)	60	1014_14.D	xxxxxxxxxxxx		10/14/21 12:12
65)	61	1014_15.D	xxxxxxxxxxxx		10/14/21 13:28
66)	62	1014_16.D	xxxxxxxxxxxx		10/14/21 14:16

67)	63	1014_17.D	xxxxxxxxxxxx	10/14/21	15:00
68)	64	1014_18.D	xxxxxxxxxxxx	10/14/21	15:43
69)	65	1014_19.D	xxxxxxxxxxxx	10/14/21	16:26
70)	66	1014_20.D	xxxxxxxxxxxx	10/14/21	17:03
71)	67	1014_21.D	xxxxxxxxxxxx	10/14/21	17:40
72)	68	1014_22.D	xxxxxxxxxxxx	10/14/21	18:17
73)	69	1014_23.D	xxxxxxxxxxxx	10/14/21	18:54
74)	70	1014_24.D	xxxxxxxxxxxx	10/14/21	19:39
75)	71	1014_25.D	xxxxxxxxxxxx	10/14/21	20:24
76)	72	1014_26.D	xxxxxxxxxxxx	10/14/21	22:25
77)	73	1014_27.D	xxxxxxxxxxxx	10/14/21	23:01
78)	74	1014_28.D	xxxxxxxxxxxx	10/14/21	23:37

5B  
AIR INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Phoenix Environmental Labs

Client: \_\_\_\_\_

Lab Code: Phoenix

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: GCJ63992

Lab File ID: 1022\_02.D

BFB Injection Date: 10/22/21

Instrument ID: CHEM20

BFB Injection Time: 10:59

GC Column: RTX-1 60M

Heated Purge: (Y/N) Y

AutoFind: Scans 779, 780, 781; Background Corrected with Scan 775

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	29.5
75	30.0 - 66.0% of mass 95	50.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.1 ( 0.1 )1
174	50.0 - 120.0% of mass 95	86.9
175	4.0 - 9.0% of mass 174	7.8 ( 6.7 )1
176	93.0 - 101.0% of mass 174	94.6 ( 82.2 )1
177	5.0 - 9.0% of mass 176	6.5 ( 5.3 )1

1-Value is % mass 95

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01 CCAL 1	1ppb ccal	1022_02.D	10/22/21	10:59	
02 CJ63030 LCS	CJ63030 LCS	1022_04.D	10/22/21	12:13	
03 CJ63030 BLANK	CJ63030 BLANK	1022_06.D	10/22/21	13:20	
04 CJ63030 QC	CJ63030 QC	1022_07.D	10/22/21	14:28	
05 63030 dup	CJ63030 DUP	1022_08.D	10/22/21	15:10	
06 SV-1 5X	CJ63992 5X	1022_23.D	10/23/21	00:16	
07 SV-2 5X	CJ63993 5X	1022_24.D	10/23/21	00:52	
08 SV-3 5X	CJ63994 5X	1022_25.D	10/23/21	01:29	
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

(\*) Outside 24 hr clock

FORM V AIR

7A  
AIR CONTINUING CALIBRATION CHECK

validated in SDG  
GCJ63027

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
 Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63992  
 Instrument: CHEM20 Calibration Date: 10/22/21 Time: 10:59  
 Lab File Id: 1022\_02.D Init. Calib. Date(s): 10/12/21 10/13/21  
 Heated Purge (Y/N): Y Init. Calib. Times: 19:21 05:11  
 GC Column: RTX-1 60M Method File: 20\_AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	LIMITS
Propylene	1.183	1.335		-12.8	30
Dichlorodifluoromethane	2.411	2.645		-9.7	30
Chloromethane	1.259	1.468		-16.6	30
1,2-Dichlorotetrafluoroethane	2.276	2.457		-8.0	30
Vinyl Chloride	1.002	1.090		-8.8	30
1,3-Butadiene	1.007	1.078		-7.1	30
Bromomethane	0.881	0.905		-2.7	30
Chloroethane	0.455	0.451		0.9	30
Ethanol	0.545	0.756	J all samples	-38.7 #	30
Acetone	2.229	2.576		-15.6	30
Trichlorofluoromethane	2.606	2.949		-13.2	30
Isopropylalcohol	2.978	3.245		-9.0	30
Acrylonitrile	1.054	1.185		-12.4	30
1,1-Dichloroethene	1.993	2.005		-0.6	30
Methylene Chloride	1.943	2.157		-11.0	30
Carbon Disulfide	2.696	2.688		0.3	30
Trichlorotrifluoroethane	2.140	2.158		-0.8	30
Trans-1,2-Dichloroethene	1.772	1.823		-2.9	30
1,1-Dichloroethane	1.978	2.030		-2.6	30
Methyl tert-butyl ether(MTBE)	2.561	2.638		-3.0	30
Methyl Ethyl Ketone	3.201	3.437		-7.4	30
Cis-1,2-Dichloroethene	1.395	1.034		25.9	30
Hexane	2.041	2.104		-3.1	30
Chloroform	2.152	2.271		-5.5	30
Ethyl acetate	0.425	0.417		1.9	30
Tetrahydrofuran	1.835	1.976		-7.7	30
1,2-Dichloroethane	1.513	1.721		-13.7	30
1,1,1-Trichloroethane	2.276	2.405		-5.7	30
Benzene	3.026	2.756		8.9	30
Carbon Tetrachloride	2.357	2.459		-4.3	30
Cyclohexane	1.420	1.579		-11.2	30
1,2-dichloropropane	0.368	0.342		7.1	30
Bromodichloromethane	0.576	0.578		-0.3	30
Trichloroethene	0.383	0.377		1.6	30
1,4-Dioxane	0.163	0.158		3.1	30

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63992

Instrument: CHEM20 Calibration Date: 10/22/21 Time: 10:59

Lab File Id: 1022\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:21 05:11

GC Column: RTX-1 60M Method File: 20\_AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
Heptane	0.827	0.951		-15.0	30
cis-1,3-Dichloropropene	0.426	0.409		4.0	30
4-Methyl-2-pentanone(MIBK)	1.106	1.129		-2.1	30
trans-1,3-Dichloropropene	0.381	0.346		9.2	30
1,1,2-Trichloroethane	0.331	0.302		8.8	30
Toluene	0.945	0.863		8.7	30
Dibromochloromethane	0.615	0.566		8.0	30
2-Hexanone(MBK)	0.888	0.896		-0.9	30
1,2-Dibromoethane(EDB)	0.493	0.442		10.3	30
Tetrachloroethene	0.490	0.476		2.9	30
1,1,1,2-Tetrachloroethane	0.974	1.114		-14.4	30
Chlorobenzene	1.539	1.560		-1.4	30
Ethylbenzene	2.620	2.634		-0.5	30
m,p-Xylene	1.971	1.694		14.1	30
Bromoform	1.182	1.167		1.3	30
Styrene	1.427	1.361		4.6	30
1,1,2,2-Tetrachloroethane	1.483	1.422		4.1	30
o-Xylene	2.110	2.130		-0.9	30
Isopropylbenzene	2.877	3.043		-5.8	30
4-Ethyltoluene	2.875	2.906		-1.1	30
1,3,5-Trimethylbenzene	2.531	2.823		-11.5	30
1,2,4-Trimethylbenzene	2.544	2.623		-3.1	30
Benzyl chloride	5.284	5.444		-3.0	30
1,3-Dichlorobenzene	1.367	1.249		8.6	30
1,4-Dichlorobenzene	1.197	1.047		12.5	30
sec-Butylbenzene	3.662	3.855		-5.3	30
4-Isopropyltoluene	3.555	3.705		-4.2	30
1,2-Dichlorobenzene	1.403	1.374		2.1	30
n-Butylbenzene	2.771	2.716	none bracketed	2.0	30
1,2,4-Trichlorobenzene	qfi 1.000	0.64	reported from full scan, no eval	36.0 #	20
Hexachlorobutadiene	1.326	1.402		-5.7	30
1,2-Dichlorotetrafluoroethane(sim)	2.278	2.198		3.5	30
Vinyl Chloride(sim)	1.074	1.070		0.4	30
Bromomethane(sim)	0.903	0.810		10.3	30
Trichlorofluoromethane(sim)	2.701	2.875		-6.4	30

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.



7B  
AIR CONTINUING CALIBRATION CHECK

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_

Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63992

Instrument: CHEM20 Calibration Date: 10/22/21 Time: 10:59

Lab File Id: 1022\_02.D Init. Calib. Date(s): 10/12/21 10/13/21

Heated Purge (Y/N): Y Init. Calib. Times: 19:21 05:11

GC Column: RTX-1 60M Method File: 20\_AIR\_1012.M

COMPOUND	RRF	RRF1	RRF MIN	%D	% D LIMITS
1,2-Dichloroethane(sim)	1.473	1.542		-4.7	30
1,1,1-Trichloroethane(sim)	2.349	2.402		-2.3	30
Benzene(sim)	2.905	2.468		15.0	30
Carbon Tetrachloride(sim)	2.218	2.452		-10.6	30
1,1-Dichloroethene(sim)	1.865	1.796		3.7	30
Trichlorotrifluoroethane(sim)	2.221	2.134		3.9	30
Trans-1,2-Dichloroethene(sim)	1.717	1.633		4.9	30
1,1-Dichloroethane(sim)	2.072	2.007		3.1	30
Cis-1,2-Dichloroethene(sim)	1.462	1.517		-3.8	30
Chloroform(sim)	2.174	2.139		1.6	30
1,2-dichloropropane(sim)	0.428	0.381		11.0	30
Bromodichloromethane(sim)	0.617	0.578		6.3	30
Trichloroethene(sim)	0.463	0.429		7.3	30
1,4-Dioxane(sim)	0.163	0.158		3.1	30
cis-1,3-Dichloropropene(sim)	0.473	0.419		11.4	30
1,1,2-Trichloroethane(sim)	0.354	0.300		15.3	30
Dibromochloromethane(sim)	0.704	0.653		7.2	30
1,2-Dibromoethane(EDB)(sim)	0.530	0.441		16.8	30
Tetrachloroethene(sim)	0.611	0.581		4.9	30
Bromoform(sim)	1.510	1.399		7.4	30
m,p-Xylene(sim)	2.292	2.121		7.5	30
1,1,2,2-Tetrachloroethane(sim)	1.781	1.578		11.4	30
Benzyl chloride(sim)	1.368	1.320		3.5	30
1,3-Dichlorobenzene(sim)	1.551	1.425		8.1	30
1,4-Dichlorobenzene(sim)	1.228	1.039		15.4	30
sec-Butylbenzene(sim)	4.443	4.258		4.2	30
4-Isopropyltoluene(sim)	4.107	3.687		10.2	30
1,2-Dichlorobenzene(sim)	1.705	1.565		8.2	30
n-Butylbenzene(sim)	2.836	2.727		3.8	30
1,2,4-Trichlorobenzene(sim)	qfi	1.000	0.71	within +/- 30% - no	29.0 #
Hexachlorobutadiene(sim)		1.983	1.853	qual	6.6
% Bromofluorobenzene		1.229	1.242		-1.1

(\*) Recommended RRF not met (+) %D exceeds criteria % (#) %D exceeds (maximum) criteria

%D: 20% of target compounds are allowed to be above criteria %, but must be less than the (maximum) %D

(#) Maximum %D not met.

8A  
AIR INTERNAL STANDARD AREA AND RT SUMMARY  
Full Scan

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
 Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63992  
 Lab Method / File Id: 20\_AIR\_1012.M / 1022\_02.D Date Analyzed: 10/22/21  
 Instrument ID: CHEM20 Time Analyzed: 10:59  
 GC Column: RTX-1 60M ID: 0.18 (mm) Heated Purge:(Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #			LAB FILE ID
REFERENCE STD	265390	6.62	1051313	7.78	457511	10.31			1022_02.D
UPPER LIMIT	372873	6.95	1477095	8.11	642803	10.64			1022_02.D
LOWER LIMIT	157907	6.29	625531	7.45	272219	9.98			1022_02.D
CLIENT ID									
01 CCAL 1	265390	6.62	1051313	7.78	457511	10.31			1022_02.D
02 CJ63030 LCS	279537	6.62	1106748	7.78	527594	10.31			1022_04.D
03 CJ63030 BLANK	278156	6.62	1086049	7.78	462490	10.31			1022_06.D
04 CJ63030 QC	263553	6.62	1041012	7.78	475781	10.31			1022_07.D
05 63030 dup	258699	6.62	1031336	7.78	472780	10.31			1022_08.D
06 SV-1 5X	294278	6.63	1165144	7.78	525737	10.31			1022_23.D
07 SV-2 5X	285150	6.63	1140198	7.78	507010	10.31			1022_24.D
08 SV-3 5X	281614	6.63	1124518	7.78	498671	10.31			1022_25.D
09									
10									
11									
12	✓	✓	✓	✓	✓	✓			
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

FORM VIII VOA

**8A**  
**AIR INTERNAL STANDARD AREA AND RT SUMMARY**  
**Sim Scan**

Lab Name: Phoenix Environmental Labs Client: \_\_\_\_\_  
Lab Code: Phoenix Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: GCJ63992  
Lab Method / File Id: 20\_AIR\_1012.M / 1022\_02.D Date Analyzed: 10/22/21  
Instrument ID: CHEM20 Time Analyzed: 10:59  
GC Column: RTX-1 60M ID: 0.18 (mm) Heated Purge:(Y/N) Y

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +140% of internal standard area

AREA LOWER LIMIT = - 60% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

# Injection Log

Data Directory: H:\AIR2021\CHEM20\100CT\22\

Line	Vl	FileName	SampleName	MscInfo	Injection Time
1)	0	1022_29.D	xxxxxxxxxxxx		N/A
2)	1	1022_01.D	xxxxxxxxxxxx		10/22/21 10:23
3)	2	1022_02.D	BFB TUNE - CCAL 1	1ppb ccal - 1ppb cc	10/22/21 10:59
4)	3	1022_03.D	xxxxxxxxxxxx		10/22/21 11:35
5)	4	1022_04.D	CJ63030 LCS		10/22/21 12:13
6)	5	1022_05.D	xxxxxxxxxxxx		10/22/21 12:46
7)	6	1022_06.D	CJ63030 BLANK	CJ63030 BLANK	10/22/21 13:20
8)	7	1022_07.D	CJ63030 QC	CJ63030 QC	10/22/21 14:28
9)	8	1022_08.D	63030 dup	CJ63030 DUP	10/22/21 15:10
10)	9	1022_09.D	xxxxxxxxxxxx		10/22/21 15:48
11)	10	1022_10.D	xxxxxxxxxxxx		10/22/21 16:24
12)	11	1022_11.D	xxxxxxxxxxxx		10/22/21 17:00
13)	12	1022_12.D	xxxxxxxxxxxx		10/22/21 17:36
14)	13	1022_13.D	xxxxxxxxxxxx		10/22/21 18:11
15)	14	1022_14.D	xxxxxxxxxxxx		10/22/21 18:47
16)	15	1022_15.D	xxxxxxxxxxxx		10/22/21 19:23
17)	16	1022_16.D	xxxxxxxxxxxx		10/22/21 20:00
18)	17	1022_17.D	xxxxxxxxxxxx		10/22/21 20:36
19)	18	1022_18.D	xxxxxxxxxxxx		10/22/21 21:12
20)	19	1022_19.D	xxxxxxxxxxxx		10/22/21 21:49
21)	20	1022_20.D	xxxxxxxxxxxx		10/22/21 22:25
22)	21	1022_21.D	xxxxxxxxxxxx		10/22/21 23:03
23)	22	1022_22.D	xxxxxxxxxxxx		10/22/21 23:39
24)	23	1022_23.D	SV-1 5X	CJ63992 5X	10/23/21 0:16
25)	24	1022_24.D	SV-2 5X	CJ63993 5X	10/23/21 0:52
26)	25	1022_25.D	SV-3 5X	CJ63994 5X	10/23/21 1:29
27)	26	1022_26.D	xxxxxxxxxxxx		10/23/21 3:06
28)	27	1022_27.D	xxxxxxxxxxxx		10/23/21 3:44
29)	28	1022_28.D	xxxxxxxxxxxx		10/23/21 4:20

# Injection Log

Data Directory: H:\AIR2021\CHEM4\100CT\08\

Line	V1	FileName	SampleName	MscInfo	Injection Time
1)	0	1008_15.D	xxxxxxxxxxxx		N/A
2)	0	1008_07.D	xxxxxxxxxxxx		N/A
3)	31	1008_01.D	xxxxxxxxxxxx		10/08/21 10:06
4)	32	1008_02.D	xxxxxxxxxxxx		10/08/21 10:40
5)	32	1008_03.D	xxxxxxxxxxxx		10/08/21 11:13
6)	33	1008_04.D	xxxxxxxxxxxx		10/08/21 11:47
7)	34	1008_05.D	xxxxxxxxxxxx		10/08/21 12:24
8)	35	1008_06.D	xxxxxxxxxxxx		10/08/21 14:14
9)	37	1008_08.D	xxxxxxxxxxxx		10/08/21 16:08
10)	38	1008_09.D	xxxxxxxxxxxx		10/08/21 16:44
11)	39	1008_10.D	xxxxxxxxxxxx		10/08/21 17:21
12)	40	1008_11.D	xxxxxxxxxxxx		10/08/21 17:57
13)	41	1008_12.D	xxxxxxxxxxxx		10/08/21 18:34
14)	42	1008_13.D	CANISTER BLK 2276	CANISTER BLK 2276	10/08/21 19:10
15)	43	1008_14.D	xxxxxxxxxxxx		10/08/21 19:47
16)	44	1008_16.D	xxxxxxxxxxxx		10/08/21 21:22
17)	45	1008_17.D	xxxxxxxxxxxx		10/08/21 21:54
18)	46	1008_18.D	xxxxxxxxxxxx		10/08/21 22:27
19)	47	1008_19.D	xxxxxxxxxxxx		10/08/21 22:59
20)	48	1008_20.D	xxxxxxxxxxxx		10/08/21 23:33
21)	49	1008_21.D	xxxxxxxxxxxx		10/09/21 0:05
22)	50	1008_22.D	xxxxxxxxxxxx		10/09/21 0:38
23)	51	1008_23.D	xxxxxxxxxxxx		10/09/21 1:19
24)	52	1008_24.D	xxxxxxxxxxxx		10/09/21 2:01
25)	53	1008_25.D	xxxxxxxxxxxx		10/09/21 2:43
26)	54	1008_26.D	xxxxxxxxxxxx		10/09/21 3:31
27)	55	1008_27.D	xxxxxxxxxxxx		10/09/21 4:12
28)	56	1008_28.D	xxxxxxxxxxxx		10/09/21 4:54
29)	57	1008_29.D	xxxxxxxxxxxx		10/09/21 5:28
30)	58	1008_30.D	xxxxxxxxxxxx		10/09/21 6:01
31)	59	1008_31.D	xxxxxxxxxxxx		10/09/21 6:35

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

SV-1 5X

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63992	Lab Sample ID:	CJ63992 5X
Canister:	469	Lab File ID:	1022_23.D
Instrument:	CHEM20	Column:	RTX-1 60M
Purge Volume	200 (cc)	Date Received:	10/22/21
Matrix:	AIR	Date Analyzed:	10/23/21
		Dilution Factor:	5

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	4.58		2.91	2.91	r
75-71-8	Dichlorodifluoromethane	2.03		1.01	1.01	r
74-87-3	Chloromethane	2.42	U	2.42	2.42	r
106-99-0	1,3-Butadiene	2.26	U	2.26	2.26	r
75-00-3	Chloroethane	1.90	U	1.90	1.90	r
64-17-5	Ethanol	52.4	S	2.66	2.66	r
67-64-1	Acetone	147	S	2.11	2.11	r
75-69-4	Trichlorofluoromethane	1.12		0.891	0.891	r
67-63-0	Isopropylalcohol	2.04	U	2.04	2.04	r
107-13-1	Acrylonitrile	2.31	U	2.31	2.31	r
75-09-2	Methylene Chloride	4.32	U	4.32	4.32	r
75-15-0	Carbon Disulfide	1.61	U	1.61	1.61	r
1634-04-4	Methyl tert-butyl ether(MTBE)	1.39	U	1.39	1.39	r
78-93-3	Methyl Ethyl Ketone	1.70	U	1.70	1.70	r
110-54-3	Hexane	4.04	S	1.42	1.42	r
67-66-3	Chloroform	1.16	○	1.02	1.02	r
141-78-6	Ethyl acetate	1.39	U	1.39	1.39	r
109-99-9	Tetrahydrofuran	9.51		1.70	1.70	r
71-55-6	1,1,1-Trichloroethane	1.31		0.917	0.917	r
71-43-2	Benzene	2.81		1.57	1.57	r
56-23-5	Carbon Tetrachloride	5.42		0.159	0.159	r
110-82-7	Cyclohexane	2.40		1.45	1.45	r
142-82-5	Heptane	4.30		1.22	1.22	r
108-10-1	4-Methyl-2-pentanone(MIBK)	1.22	U	1.22	1.22	r
10061-02-6	trans-1,3-Dichloropropene	1.10	U	1.10	1.10	r
108-88-3	Toluene	18.8	○	1.33	1.33	r
591-78-6	2-Hexanone(MBK)	6.35		1.22	1.22	r
127-18-4	Tetrachloroethene	64.8		0.184	0.184	r
630-20-6	1,1,1,2-Tetrachloroethane	0.729	U	0.729	0.729	r
108-90-7	Chlorobenzene	1.09	U	1.09	1.09	r
100-41-4	Ethylbenzene	5.68		1.15	1.15	r
179601-23-1	m,p-Xylene	24.5		1.15	1.15	r
100-42-5	Styrene	1.17	U	1.17	1.17	r
95-47-6	o-Xylene	9.87	○	1.15	1.15	r
98-82-8	Isopropylbenzene	1.02	U	1.02	1.02	r
622-96-8	4-Ethyltoluene	2.95		1.02	1.02	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Client:	<u>GZA-NY</u>	Lab:	<u>Phoenix Env. Labs</u>	UV-15X
SDG No.:	<u>GCJ63992</u>	Lab Sample ID:	<u>CJ63992 5X</u>	
Canister:	<u>469</u>	Lab File ID:	<u>1022_23.D</u>	
Instrument:	<u>CHEM20</u>	Column:	<u>RTX-1 60M</u>	Date Received: <u>10/22/21</u>
Purge Volume	<u>200</u>	(cc)	Date Analyzed:	<u>10/23/21</u>
Matrix:	<u>AIR</u>	Dilution Factor:	<u>5</u>	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

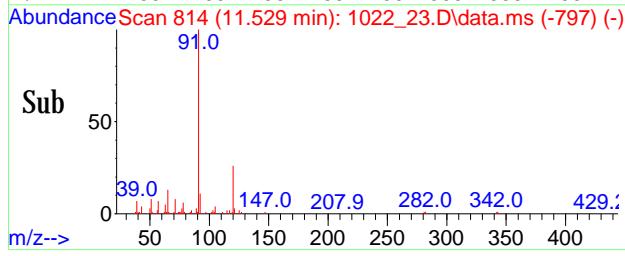
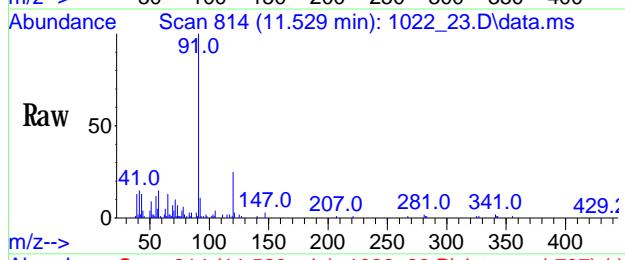
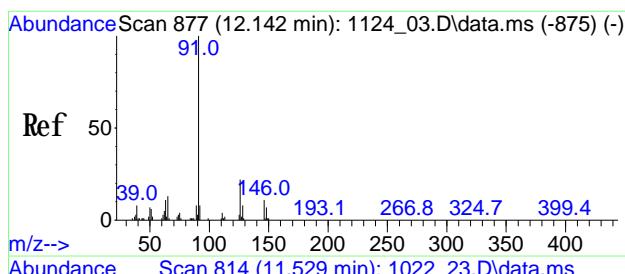
## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM20\100CT\22\  
 Data File : 1022\_23.D  
 Acq On : 23 Oct 2021 12:16 am  
 Operator :  
 Client ID : SV-1 5X  
 Lab ID : CJ63992 5X  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 25 09:06:50 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 Last Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

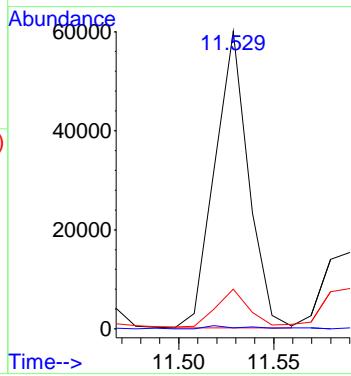
Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.627	130	294278	10.000	ng	0.00
37) 1, 4-Difluorobenzene	7.779	114	1165144	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	525737	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.632	130	330563	10.000	ng	# 0.00
96) 1, 4-Difluorobenzene(sim)	7.779	114	1164599	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	525737	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.159	95	636056	9.844	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	=	98.40%
<b>Target Compounds</b>						
2) Propylene	3.529	41	31910	0.916	ppbv#	82
3) Dichlorodifluoromethane	3.583	85	28728	0.405	ppbv	95
11) Ethanol	4.488	45	167970m	10.475	ppbv	47
12) Acetone	4.779	43	1933740	29.482	ppbv	98
13) Trichlorofluoromethane	4.812	101	17089	0.223	ppbv#	84
28) Hexane	6.637	57	48550	0.808	ppbv#	81
29) Chloroform	6.700	83	14678	0.232	ppbv	94
31) Tetrahydrofuran	7.054	42	102668	1.901	ppbv	95
33) 1, 1, 1-Trichloroethane	7.304	97	17494	0.261	ppbv	92
34) Benzene	7.590	78	49972	0.561	ppbv#	93
35) Carbon Tetrachloride	7.679	117	75169	1.084	ppbv	99
36) Cyclohexane	7.746	41	20053	0.480	ppbv#	88
44) Heptane	8.370	43	82808	0.860	ppbv#	91
49) Toluene	9.294	91	413861	3.761	ppbv	99
51) 2-Hexanone (BK)	9.517	43	131340	1.269	ppbv#	56
53) Tetrachloroethylene	9.944	166	740499	12.960	ppbv	98
57) Ethylbenzene	10.534	91	156486	1.136	ppbv	99
58) m, p-Xylene	10.627	91	508510	4.908	ppbv	99
62) o-Xylene	10.903	91	218829	1.973	ppbv	98
67) 4-Ethyltoluene	11.652	105	89213	0.590	ppbv#	72
68) 1, 3, 5-Trimethylbenzene	11.652	105	89213	0.671	ppbv#	96
69) 1, 2, 4-Trimethylbenzene	11.908	105	241735	1.808	ppbv#	85
71) Benzyl chloride	11.529	91	74198	0.267	ppbv#	81
85) Trichlorofluoromethane...	4.817	101	19550	0.219	ppbv#	98
87) 1, 1, 1-Trichloroethane(...)	7.309	97	20263	0.261	ppbv#	99
88) Benzene(sim)	7.590	78	49972	0.520	ppbv#	93
89) Carbon Tetrachloride(sim)	7.674	117	81839	1.116	ppbv	99
95) Chloroform(sim)	6.705	83	15263	0.212	ppbv#	94
105) Tetrachloroethylene(sim)	9.950	166	882372	12.393	ppbv	100
108) m, p-Xylene(sim)	10.627	91	508818	4.223	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

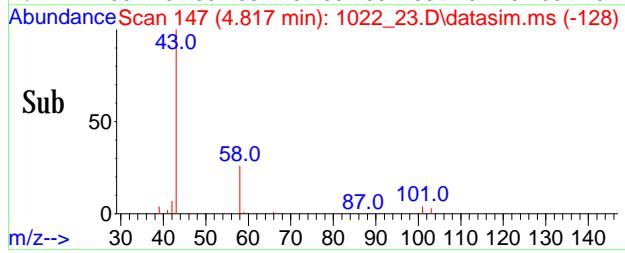
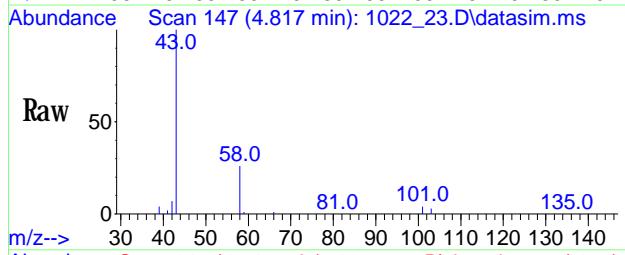
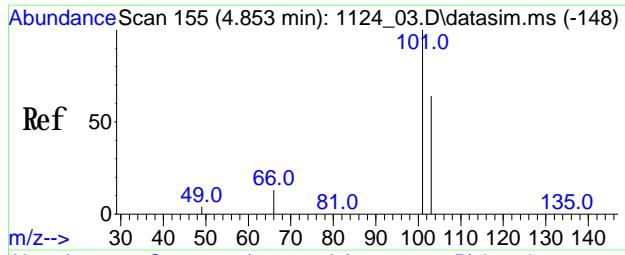


#71  
Benzyl chloride  
Conc: 88 0.267 ppbv  
RT: 11.529 min Scan# 814  
Delta R.T. -0.000 min  
Lab File: 1022\_23.D  
Acq: 23 Oct 2021 12:16 am

Tgt Ion: 91 Resp: 74198  
Ion Ratio Lower Upper  
91 100  
126 1.5 11.4 17.0#  
65 12.4 8.7 13.1

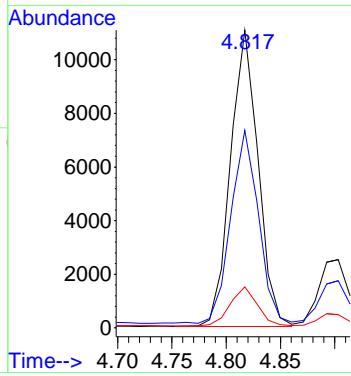


N - out of criteria ion ratio



#85  
Trichlorofluoromethane (sim)  
Conc: 88 0.219 ppbv  
RT: 4.817 min Scan# 147  
Delta R.T. 0.000 min  
Lab File: 1022\_23.D  
Acq: 23 Oct 2021 12:16 am

Tgt Ion: 101 Resp: 19550  
Ion Ratio Lower Upper  
101 100  
103 65.5 51.4 77.0#  
66 13.0 12.2 12.2#



1  
AIR ANALYSIS DATA SHEET

CLIENT ID

SV-2 5X
---------

Client: GZA-NY Lab: Phoenix Env. Labs ✓

SDG No.: GCJ63992 Lab Sample ID: CJ63993 5X

Canister: 28581 Lab File ID: 1022\_24.D

Instrument: CHEM20 ✓ Column: RTX-1 60M Date Received: 10/22/21

Purge Volume 200 (cc) Date Analyzed: 10/23/21 ✓

Matrix: AIR Dilution Factor: 5

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	2.91	U	2.91	2.91	r
75-71-8	Dichlorodifluoromethane	2.55	○	1.01	1.01	r
74-87-3	Chloromethane	2.42	U	2.42	2.42	r
106-99-0	1,3-Butadiene	2.26	U	2.26	2.26	r
75-00-3	Chloroethane	1.90	U	1.90	1.90	r
64-17-5	Ethanol	102	S	2.66	2.66	r
67-64-1	Acetone	65.8	S	2.11	2.11	r
67-63-0	Isopropylalcohol	2.04	U	2.04	2.04	r
107-13-1	Acrylonitrile	2.31	U	2.31	2.31	r
75-09-2	Methylene Chloride	4.32	U	4.32	4.32	r
75-15-0	Carbon Disulfide	2.37		1.61	1.61	r
1634-04-4	Methyl tert-butyl ether(MTBE)	1.39	U	1.39	1.39	r
78-93-3	Methyl Ethyl Ketone	1.70	U	1.70	1.70	r
110-54-3	Hexane	9.15	S	1.42	1.42	r
141-78-6	Ethyl acetate	1.39	U	1.39	1.39	r
109-99-9	Tetrahydrofuran	26.6		1.70	1.70	r
71-55-6	1,1,1-Trichloroethane	8.04		0.917	0.917	r
71-43-2	Benzene	2.75		1.57	1.57	r
56-23-5	Carbon Tetrachloride	1.22		0.159	0.159	r
110-82-7	Cyclohexane	5.38		1.45	1.45	r
142-82-5	Heptane	4.72	○	1.22	1.22	r
108-10-1	4-Methyl-2-pentanone(MIBK)	1.22	U	1.22	1.22	r
10061-02-6	trans-1,3-Dichloropropene	1.10	U	1.10	1.10	r
108-88-3	Toluene	17.1		1.33	1.33	r
591-78-6	2-Hexanone(MBK)	1.22	U	1.22	1.22	r
127-18-4	Tetrachloroethene	5.48		0.184	0.184	r
630-20-6	1,1,1,2-Tetrachloroethane	0.729	U	0.729	0.729	r
108-90-7	Chlorobenzene	1.09	U	1.09	1.09	r
100-41-4	Ethylbenzene	4.96		1.15	1.15	r
179601-23-1	m,p-Xylene	21.5		1.15	1.15	r
100-42-5	Styrene	1.17	U	1.17	1.17	r
95-47-6	o-Xylene	8.91		1.15	1.15	r
98-82-8	Isopropylbenzene	1.02	U	1.02	1.02	r
622-96-8	4-Ethyltoluene	8.35		1.02	1.02	r
108-67-8	1,3,5-Trimethylbenzene	3.31	○	1.02	1.02	r
95-63-6	1,2,4-Trimethylbenzene	10.6	○	1.02	1.02	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1

## CLIENT ID

Client:	<u>GZA-NY</u>	Lab:	<u>Phoenix Env. Labs</u>	UV 2.5X
SDG No.:	<u>GCJ63992</u>	Lab Sample ID:	<u>CJ63993 5X</u>	
Canister:	<u>28581</u>	Lab File ID:	<u>1022_24.D</u>	
Instrument:	<u>CHEM20</u>	Column:	<u>RTX-1 60M</u>	Date Received: <u>10/22/21</u>
Purge Volume	<u>200</u> (cc)		Date Analyzed:	<u>10/23/21</u>
Matrix:	AIR	Dilution Factor:	5	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

**Quantitation Report (QT Reviewed)**

Data Path : H:\AIR2021\CHEM20\100CT\22\  
 Data File : 1022\_24.D  
 Acq On : 23 Oct 2021 12:52 am  
 Operator :  
 Client ID : SV-2 5X  
 Lab ID : CJ63993 5X  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 25 09:08:47 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 Last Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.627	130	285150	10.000	ng	0.00
37) 1, 4-Difluorobenzene	7.780	114	1140198	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	507010	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.632	130	316488	10.000	ng	# 0.00
96) 1, 4-Difluorobenzene(sim)	7.780	114	1139413	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	507010	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.159	95	622413	9.989	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	=	99.90%
<b>Target Compounds</b>						
3) Dichlorodifluoromethane	3.583	85	35092	0.510	ppbv#	95
11) Ethanol	4.488	45	316716	20.384	ppbv	98
12) Acetone	4.801	43	836619	13.163	ppbv	96
20) Carbon Disulfide	5.493	76	36390	0.473	ppbv	96
28) Hexane	6.637	57	106473	1.829	ppbv	92
31) Tetrahydrofuran	7.043	42	278029	5.313	ppbv	94
33) 1, 1, 1-Trichloroethane	7.304	97	104271	1.607	ppbv	97
34) Benzene	7.590	78	47420	0.550	ppbv#	89
35) Carbon Tetrachloride	7.679	117	16311	0.243	ppbv	92
36) Cyclohexane	7.746	41	43534	1.075	ppbv	95
44) Heptane	8.370	43	88844	0.943	ppbv#	93
49) Toluene	9.294	91	367666	3.414	ppbv	99
53) Tetrachloroethene	9.944	166	61252	1.095	ppbv	98
57) Ethylbenzene	10.534	91	131800	0.992	ppbv	97
58) m,p-Xylene	10.627	91	429667	4.300	ppbv	99
62) o-Xylene	10.903	91	190626	1.782	ppbv	99
67) 4-Ethyltoluene	11.590	105	243449	1.670	ppbv	97
68) 1, 3, 5-Trimethylbenzene	11.652	105	84912	0.662	ppbv#	96
69) 1, 2, 4-Trimethylbenzene	11.908	105	272415	2.112	ppbv#	86
77) n-Butylbenzene	12.432	91	25323	0.180	ppbv#	39
87) 1, 1, 1-Trichloroethane(...)	7.309	97	115608	1.555	ppbv#	99
88) Benzene(sim)	7.590	78	47420	0.516	ppbv#	89
89) Carbon Tetrachloride(sim)	7.674	117	17989	0.256	ppbv	100
105) Tetrachloroethene(sim)	9.950	166	72159	1.036	ppbv	100
108) m,p-Xylene(sim)	10.627	91	432476	3.722	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

SV-3 5X
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Client: GZA-NY Lab: Phoenix Env. Labs ✓

SDG No.: GCJ63992 Lab Sample ID: CJ63994 5X

Canister: 23348 Lab File ID: 1022\_25.D

Instrument: CHEM20 Column: RTX-1 60M Date Received: 10/22/21 ✓

Purge Volume: 200 (cc) Date Analyzed: 10/23/21 ✓

Matrix: AIR Dilution Factor: 5

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	2.91	U	2.91	2.91	r
75-71-8	Dichlorodifluoromethane	1.01	U	1.01	1.01	r
74-87-3	Chloromethane	2.42	U	2.42	2.42	r
106-99-0	1,3-Butadiene	2.26	U	2.26	2.26	r
75-00-3	Chloroethane	1.90	U	1.90	1.90	r
64-17-5	Ethanol	126	S	2.66	2.66	r
67-64-1	Acetone	198	S	2.11	2.11	r
67-63-0	Isopropylalcohol N	8.66	S	2.04	2.04	r
107-13-1	Acrylonitrile	2.31	U	2.31	2.31	r
75-09-2	Methylene Chloride	4.32	U	4.32	4.32	r
75-15-0	Carbon Disulfide	1.61	U	1.61	1.61	r
1634-04-4	Methyl tert-butyl ether(MTBE)	1.39	U	1.39	1.39	r
78-93-3	Methyl Ethyl Ketone	8.82		1.70	1.70	r
110-54-3	Hexane	3.77	S	1.42	1.42	r
67-66-3	Chloroform	50.0		1.02	1.02	r
141-78-6	Ethyl acetate	1.39	U	1.39	1.39	r
109-99-9	Tetrahydrofuran	16.8		1.70	1.70	r
71-43-2	Benzene	1.57	U	1.57	1.57	r
110-82-7	Cyclohexane	2.17		1.45	1.45	r
79-01-6	Trichloroethene	6.39		0.186	0.186	r
142-82-5	Heptane	3.36	S	1.22	1.22	r
108-10-1	4-Methyl-2-pentanone(MIBK)	4.31		1.22	1.22	r
10061-02-6	trans-1,3-Dichloropropene	1.10	U	1.10	1.10	r
108-88-3	Toluene	14.1		1.33	1.33	r
591-78-6	2-Hexanone(MBK)	1.22	U	1.22	1.22	r
127-18-4	Tetrachloroethene	179		0.184	0.184	r
630-20-6	1,1,1,2-Tetrachloroethane	0.729	U	0.729	0.729	r
108-90-7	Chlorobenzene	1.09	U	1.09	1.09	r
100-41-4	Ethylbenzene	5.72		1.15	1.15	r
179601-23-1	m,p-Xylene	25.1	S	1.15	1.15	r
100-42-5	Styrene	1.17	U	1.17	1.17	r
95-47-6	o-Xylene	10.1		1.15	1.15	r
98-82-8	Isopropylbenzene	1.02	U	1.02	1.02	r
622-96-8	4-Ethyltoluene	8.40		1.02	1.02	r
108-67-8	1,3,5-Trimethylbenzene	2.93		1.02	1.02	r
95-63-6	1,2,4-Trimethylbenzene	9.61		1.02	1.02	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

Client:	<u>GZA-NY</u>	Lab:	Phoenix Env. Labs	UV-35X
SDG No.:	<u>GCJ63992</u>	Lab Sample ID:	<u>CJ63994 5X</u>	
Canister:	<u>23348</u>	Lab File ID:	<u>1022_25.D</u>	
Instrument:	<u>CHEM20</u>	Column:	<u>RTX-1 60M</u>	Date Received: <u>10/22/21</u>
Purge Volume	<u>200</u>	(cc)	Date Analyzed:	<u>10/23/21</u>
Matrix:	AIR		Dilution Factor:	5

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

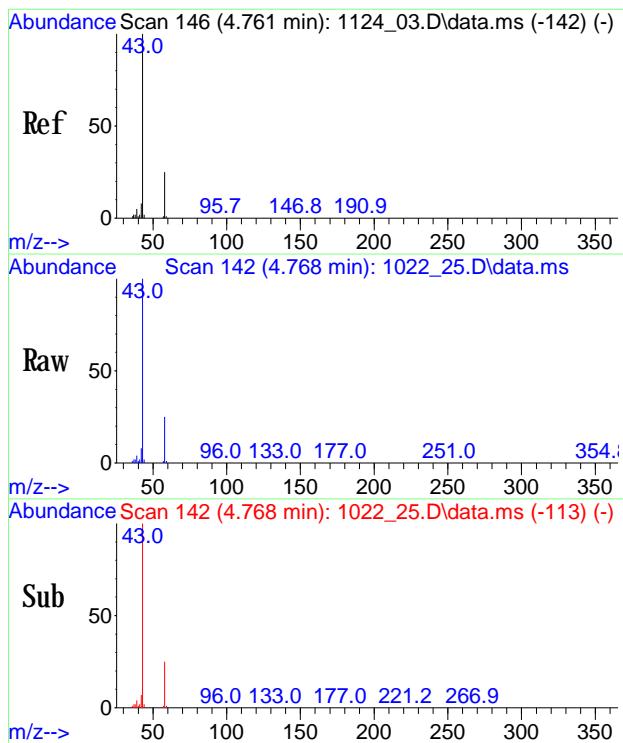
## Quantitation Report (QT Reviewed)

Data Path : H:\AIR2021\CHEM20\100CT\22\  
 Data File : 1022\_25.D  
 Acq On : 23 Oct 2021 1:29 am  
 Operator :  
 Client ID : SV-3 5X  
 Lab ID : CJ63994 5X  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 25 09:10:44 2021  
 Quant Method : H:\AIR2021\CHEM20\METHODS\20\_AIR\_1012.M  
 Quant Title : VOA Standards for 5 point calibration  
 QLast Update : Wed Oct 13 11:26:15 2021  
 Response via : Initial Calibration

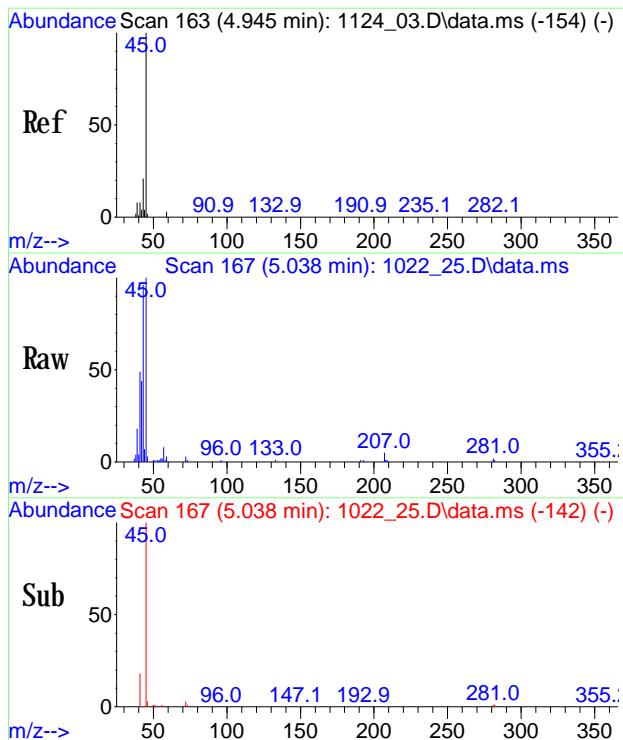
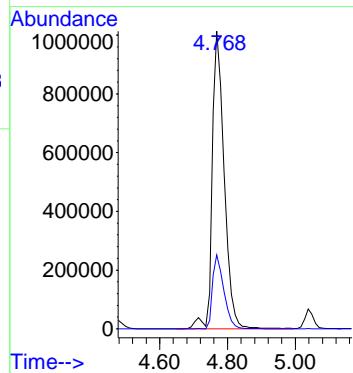
Compound	R. T.	QIon	Response	Conc	Units	Dev(Mn)
<b>Internal Standards</b>						
1) Bromochloromethane	6.627	130	281614	10.000	ng	0.00
37) 1, 4-Difluorobenzene	7.779	114	1124518	10.000	ng	-0.01
54) Chlorobenzene-d5	10.309	82	498671	10.000	ng	-0.01
81) Bromochloromethane(sim)	6.632	130	316820	10.000	ng	# 0.00
96) 1, 4-Difluorobenzene(sim)	7.779	114	1124518	10.000	ng	-0.01
106) Chlorobenzene-d5(sim)	10.309	82	498671	10.000	ng	-0.01
<b>System Monitoring Compounds</b>						
63) % Bromofluorobenzene	11.159	95	618504	10.092	ppbv	-0.01
Spiked Amount	10.000	Range	70 - 130	Recovery	= 100.90%	
<b>Target Compounds</b>						
3) Dichlorodifluoromethane	3.583	85	13458	0.198	ppbv	97
11) Ethanol	4.467	45	386397	25.181	ppbv	98
12) Acetone	4.768	43	2484751	39.586	ppbv	96
14) Isopropyl alcohol	5.038	45	145171	1.731	ppbv#	1
26) Methyl Ethyl Ketone	6.347	43	158954	1.763	ppbv#	80
28) Hexane	6.637	57	43284	0.753	ppbv	83
29) Chloroform	6.700	83	605969	9.997	ppbv	97
31) Tetrahydrofuran	7.043	42	173650	3.360	ppbv	93
35) Carbon Tetrachloride	7.679	117	4007	0.060	ppbv#	79
36) Cyclohexane	7.746	41	17336	0.434	ppbv#	71
40) Trichloroethene	8.214	130	55032	1.277	ppbv	96
44) Heptane	8.370	43	62402	0.671	ppbv#	91
46) 4-Methyl-2-pentanone(M..)	8.826	43	107098	0.861	ppbv	99
49) Toluene	9.294	91	298557	2.811	ppbv	99
53) Tetrachloroethene	9.944	166	1975859	35.830	ppbv	98
57) Ethyl benzene	10.534	91	149360	1.143	ppbv	99
58) m, p-Xylene	10.627	91	494212	5.029	ppbv	99
62) o-Xylene	10.903	91	212792	2.023	ppbv	100
67) 4-Ethyltoluene	11.590	105	240731	1.679	ppbv	99
68) 1, 3, 5-Trimethylbenzene	11.652	105	73956	0.586	ppbv#	95
69) 1, 2, 4-Trimethylbenzene	11.908	105	243717	1.921	ppbv#	84
89) Carbon Tetrachloride(sim)	7.674	117	4313	0.061	ppbv	90
95) Chloroform(sim)	6.705	83	647983	9.406	ppbv	97
99) Trichloroethene(sim)	8.219	130	64548	1.240	ppbv	100
105) Tetrachloroethene(sim)	9.950	166	2355787	34.267	ppbv	100
108) m, p-Xylene(sim)	10.627	91	496978	4.348	ppbv	99

(#)out of range (m)manual integration reviewed by analyst (+)signals summed



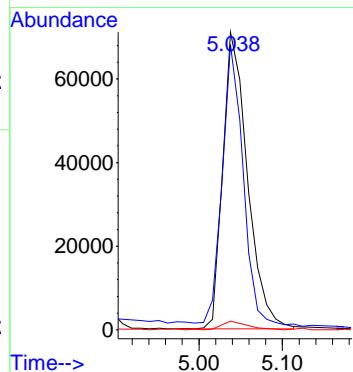
#12  
**Acetone**  
 Conc: 8\$ 39.586 ppbv  
 RT: 4.768 min Scan# 142  
 Delta R.T. 0.010 min  
 Lab File: 1022\_25.D  
 Acq: 23 Oct 2021 1:29 am

Tgt Ion: 43 Resp: 2484751  
 Ion Ratio Lower Upper  
 43 100  
 58 23.6 20.6 30.8



#14  
**Isopropyl alcohol**  
 Conc: 8\$ 1.731 ppbv  
 RT: 5.038 min Scan# 167  
 Delta R.T. 0.065 min  
 Lab File: 1022\_25.D  
 Acq: 23 Oct 2021 1:29 am

Tgt Ion: 45 Resp: 145171  
 Ion Ratio Lower Upper  
 45 100  
 43 79.0 13.1 19.7#  
 59 3.1 2.4 3.6



N - out of criteria  
 ion ratio

1  
AIR ANALYSIS DATA SHEET

CLIENT ID

CANISTER BLK 2276

Client:	GZA-NY	Lab:	Phoenix Env. Labs
SDG No.:	GCJ63992	Lab Sample ID:	CANISTER BLK 2276
Canister:	CANBL	Lab File ID:	1008_13.D
Instrument:	CHEM24	Date Received:	
Purge Volume	200 (cc)	Date Analyzed:	10/08/21
Matrix:	AIR	Dilution Factor:	1

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

CAS NO.	COMPOUND	CONC.	Q	MDL	PQL	R
115-07-1	Propylene	0.581	U	0.581	0.581	r
75-71-8	Dichlorodifluoromethane	0.202	U	0.202	0.202	r
74-87-3	Chloromethane	0.485	U	0.485	0.485	r
106-99-0	1,3-Butadiene	0.452	U	0.452	0.452	r
75-00-3	Chloroethane	0.379	U	0.379	0.379	r
64-17-5	Ethanol	0.531	U	0.531	0.531	r
67-64-1	Acetone	0.421	U	0.421	0.421	r
67-63-0	Isopropylalcohol	0.407	U	0.407	0.407	r
107-13-1	Acrylonitrile	0.461	U	0.461	0.461	r
75-09-2	Methylene Chloride	0.863	U	0.863	0.863	r
75-15-0	Carbon Disulfide	0.321	U	0.321	0.321	r
1634-04-4	Methyl tert-butyl ether(MTBE)	0.278	U	0.278	0.278	r
78-93-3	Methyl Ethyl Ketone	0.339	U	0.339	0.339	r
110-54-3	Hexane	0.284	U	0.284	0.284	r
141-78-6	Ethyl acetate	0.278	U	0.278	0.278	r
109-99-9	Tetrahydrofuran	0.339	U	0.339	0.339	r
110-82-7	Cyclohexane	0.291	U	0.291	0.291	r
142-82-5	Heptane	0.244	U	0.244	0.244	r
108-10-1	4-Methyl-2-pentanone(MIBK)	0.244	U	0.244	0.244	r
10061-02-6	trans-1,3-Dichloropropene	0.220	U	0.220	0.220	r
108-88-3	Toluene	0.266	U	0.266	0.266	r
591-78-6	2-Hexanone(MBK)	0.244	U	0.244	0.244	r
108-90-7	Chlorobenzene	0.217	U	0.217	0.217	r
100-42-5	Styrene	0.235	U	0.235	0.235	r
98-82-8	Isopropylbenzene	0.204	U	0.204	0.204	r
622-96-8	4-Ethyltoluene	0.204	U	0.204	0.204	r
108-67-8	1,3,5-Trimethylbenzene	0.204	U	0.204	0.204	r
95-63-6	1,2,4-Trimethylbenzene	0.204	U	0.204	0.204	r
76-14-2	1,2-Dichlorotetrafluoroethane(sim)	0.143	U	0.143	0.143	r
75-01-4	Vinyl Chloride(sim)	0.078	U	0.078	0.078	r
74-83-9	Bromomethane(sim)	0.258	U	0.258	0.258	r
75-69-4	Trichlorofluoromethane(sim)	0.178	U	0.178	0.178	r
71-55-6	1,1,1-Trichloroethane(sim)	0.183	U	0.183	0.183	r
71-43-2	Benzene(sim)	0.313	U	0.313	0.313	r
56-23-5	Carbon Tetrachloride(sim)	0.032	U	0.032	0.032	r
75-35-4	1,1-Dichloroethene(sim)	0.051	U	0.051	0.051	r

FORM I AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

1 AIR ANALYSIS DATA SHEET

## CLIENT ID

Client:	<u>GZA-NY</u>	Lab:	<u>Phoenix Env. Labs</u>	<u>CANISTER BLK 2276</u>
SDG No.:	<u>GCJ63992</u>	Lab Sample ID:	<u>CANISTER BLK 2276</u>	
Canister:	<u>CANBL</u>	Lab File ID:	<u>1008_13.D</u>	
Instrument:	<u>CHEM24</u>	Column:	<u> </u>	
Purge Volume	<u>200</u>	(cc)	Date Analyzed:	<u>10/08/21</u>
Matrix:	AIR	Dilution Factor:	1	

CONCENTRATION UNITS: (ppbv or ug/m<sup>3</sup>) ppbv

## FORM | AIR

r=Result Reported U=Not Detected D=Reported Dilution E/J=Estimated Value X=Not Used S=Lab Solvent

**SECTION 4**

**CASE NARRATIVES AND CHAIN-OF-CUSTODY RECORDS**

**Project Name:** 101 E 150TH ST RI  
**Project Number:** 41.0162951.10

**Lab Number:** L2244833  
**Report Date:** 08/25/22

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



**Project Name:** 101 E 150TH ST RI  
**Project Number:** 41.0162951.10

**Lab Number:** L2244833  
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### Case Narrative (continued)

#### Volatile Organics in Air

Canisters were released from the laboratory on August 12 & 15, 2022. The canister certification results are provided as an addendum.

#### Sample Receipt

L2244833-03: The canister vacuum measured on receipt at the laboratory was > 15 in. Hg. Prior to sample analysis, the canisters were pressurized with UHP Nitrogen in order to facilitate the transfer of sample to the Gas Chromatograph. The addition of Nitrogen resulted in a dilution of the samples. The reporting limits have been elevated accordingly.

L2244833-01D,02D,03D,05D: The samples were re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

L2244833-01D2,02D,03D2,04D,05D2,06D: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: 

Report Date: 08/25/22

Title: Technical Director/Representative



**Project Name:** 101 E 150TH ST RI  
**Project Number:** 41.0162951.10

**Lab Number:** L2244833  
**Report Date:** 08/25/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2244833-01	SV-17	SOIL_VAPOR	Not Specified	08/18/22 14:40	08/18/22
L2244833-02	SV-24	SOIL_VAPOR	Not Specified	08/18/22 14:50	08/18/22
L2244833-03	SV-25	SOIL_VAPOR	Not Specified	08/18/22 15:00	08/18/22
L2244833-04	SV-18	SOIL_VAPOR	Not Specified	08/18/22 15:02	08/18/22
L2244833-05	SV-19	SOIL_VAPOR	Not Specified	08/18/22 15:05	08/18/22
L2244833-06	SV-28	SOIL_VAPOR	Not Specified	08/18/22 14:55	08/18/22
L2244833-07	AA-03	AIR	Not Specified	08/18/22 15:06	08/18/22

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format:* Data Usability Report



**Project Name:** 101 E 150TH ST RI  
**Project Number:** 41.0162951.10

**Lab Number:** L2244833  
**Report Date:** 08/25/22

#### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

**Report Format:** Data Usability Report



**Project Name:** 101 E 150TH ST RI  
**Project Number:** 41.0162951.10

**Lab Number:** L2244833  
**Report Date:** 08/25/22

**Data Qualifiers**

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- ND** - Not detected at the reporting limit (RL) for the sample.

*Report Format:* Data Usability Report





## Sample Delivery Group Summary

Alpha Job Number : L2244833

Received : 18-AUG-2022  
Reviewer : Richard Gaskill

Account Name : GZA GeoEnvironmental, Inc.

Project Number : 41.0162951.10

Project Name : 101 E 150TH ST RI

### Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

### Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
NA	Present/Intact/na			

### Condition Information

- |  |            |
|--|------------|
| 1) All samples on COC received?                                  | <b>YES</b> |
| 2) Extra samples received?                                       | <b>NO</b>  |
| 3) Are there any sample container discrepancies?                 | <b>NO</b>  |
| 4) Are there any discrepancies between sample labels & COC?      | <b>NO</b>  |
| 5) Are samples in appropriate containers for requested analysis? | <b>YES</b> |
| 6) Are samples properly preserved for requested analysis?        | <b>YES</b> |
| 7) Are samples within holding time for requested analysis?       | <b>YES</b> |
| 8) All sampling equipment returned?                              | <b>YES</b> |

### Volatile Organics/VPH

- |  |           |
|--|-----------|
| 1) Reagent Water Vials Frozen by Client? | <b>NA</b> |
|--|-----------|



ALPHA ANALYTICAL LABORATORIES, INC.  
LOGIN CHAIN OF CUSTODY REPORT  
Aug 25 2022, 12:42 pm

Login Number: L2244833

Account: GZA-NYC GZA GeoEnvironmental, Inc. Project: 41.0162951.10

Received: 18AUG22 Due Date: 25AUG22

Sample #	Client ID	Mat PR Collected
L2244833-01	SV-17   ASP-B Package Due Date: 08/25/22	11 3E 18AUG22 14:40
	ASP-B, CAN-RENT, E&I-FEE, FLOW-RENT, TO15-LL	
L2244833-02	SV-24   Package Due Date: 08/25/22	11 3E 18AUG22 14:50
	CAN-RENT, FLOW-RENT, TO15-LL	
L2244833-03	SV-25   Package Due Date: 08/25/22	11 3E 18AUG22 15:00
	CAN-RENT, FLOW-RENT, TO15-LL	
L2244833-04	SV-18   Package Due Date: 08/25/22	11 3E 18AUG22 15:02
	CAN-RENT, FLOW-RENT, TO15-LL	
L2244833-05	SV-19   Package Due Date: 08/25/22	11 3E 18AUG22 15:05
	CAN-RENT, FLOW-RENT, TO15-LL	
L2244833-06	SV-28   Package Due Date: 08/25/22	11 3E 18AUG22 14:55
	CAN-RENT, FLOW-RENT, TO15-LL	
L2244833-07	AA-03   Package Due Date: 08/25/22	10 3E 18AUG22 15:06

ALPHA ANALYTICAL LABORATORIES INC.  
LOGIN CHAIN OF CUSTODY REPORT  
Aug 25 2022, 12:42 pm

Login Number: L2244833

Account: GZA-NYC GZA GeoEnvironmental, Inc. Project: 41.0162951.10

Received: 18AUG22 Due Date: 25AUG22

Sample #	Client ID	Mat PR Collected
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CAN-RENT, FLOW-RENT, TO15-LL		
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Logged By: Richard Gaskill



## AIR ANALYSIS

PAGE 5 OF 5

8/19/22

ALPHA Job #: L2244 833

## CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048  
TEL: 508-822-9300 FAX: 508-822-3288

## Client Information

Client: GZA Environmental  
Address: 104 w 21<sup>st</sup> St  
NY, NY 10001

Phone:

Fax:

Email: ReliabilManiquet@GZA.com

 These samples have been previously analyzed by AlphaOther Project Specific Requirements/Comments: AA-03 & SV-25 were run for 2 hrs  
with no problem but Regulated vacuum only  
went down 10.20 and 10.26.

## All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION				Sample Matrix*	Sampler's Initials	Can Size	ID - Flow Controller	TO-15	TO-15 SIM	APH	Substrates & Mercaptoins by TO-15	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)	
		End Date	Start Time	End Time	Initial Vacuum												
44833-01	SV-17	8/19/22	12:40	14:40	-24.2	-5.8	SV	8B	6L	948011612	X						
-02	SV-24		12:50	14:50	-24.2	-7.35	SV			753601744	X						
-03	SV-25		13:00	15:00	-30.05	-9.75	SV			757601444	X						
-04	SV-18		13:02	15:02	-30.05	-7.42	SV			1650011496	X						
-05	SV-19		13:05	15:05	-30.4	-8.50	SV			150201773	X						
-06	SV-28		12:55	14:55	-24.8	-6.96	SV			14440559	X						
-07	AA-03		13:06	15:06	-30.14	-15.33	AA			361401453	X						

AA = Ambient Air (Indoor/Outdoor)

SV = Soil Vapor/Landfill Gas/SVE

Other = Please Specify

## \*SAMPLE MATRIX CODES

Container Type

SC

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

MSM (Signature)

Date/Time

8/19/22 15:00 (as MRN found)  
8/19/22 17:00  
8/19/22 17:00  
8/19/22 03:10

Received By:

GL AML  
GL AML  
GL AML

Date/Time:

8/19/22 13:58  
8/19/22 21:00  
8/19/22 00:00  
8/19/22 03:10



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823



## NY Analytical Services Protocol Format

October 07, 2022

SDG I.D.: GCJ63027

GZA GeoEnvironmental, Inc. 586 RIVER AVENUE

### Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CJ63027	Volatiles (TO15)	10/21/21	10/22/21	10/22/21	KCA	Y
CJ63028	Volatiles (TO15)	10/21/21	10/25/21	10/25/21	KCA	Y
CJ63029	Volatiles (TO15)	10/21/21	10/22/21	10/22/21	KCA	Y
CJ63030	Volatiles (TO15)	10/21/21	10/22/21	10/22/21	KCA	Y
CJ63031	Volatiles (TO15)	10/21/21	10/22/21	10/22/21	KCA	Y

30  
days





Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

## Sample Id Cross Reference

October 07, 2022

SDG I.D.: GCJ63027

Project ID: 586 RIVER AVENUE

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Client Id	Lab Id	Matrix
IA-3	CJ63027	AIR
SV-4	CJ63028	AIR
SV-5	CJ63029	AIR
IA-2	CJ63030	AIR
SV-6	CJ63031	AIR



Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## Canister Sampling Information

October 07, 2022

FOR: Attn: Reinbill Maniquez  
GZA GeoEnvironmental, Inc.  
104 West 29th Street 10th Floor  
NY, NY 10001

Location Code: GZA-NY

SDG I.D.: GCJ63027

Project ID: 586 RIVER AVENUE

Client Id	Lab Id	Canister		Reg. Id	Chk Out Date	Laboratory					Field			
		Id	Type			Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
IA-3	CJ63027	28591	6.0L	3500	10/15/21	-30	-5	43	44	2.3	-30	-5	10/21/21 08:55	10/21/21 10:55
SV-4	CJ63028	21367	6.0L	4980	10/15/21	-30	-4	43	43	0.0	-30	-5	10/21/21 11:35	10/21/21 13:38
SV-5	CJ63029	19635	6.0L	5647	10/15/21	-30	-9	43			-30	-8	10/21/21 11:58	10/21/21 13:50
IA-2	CJ63030	13650	6.0L	3259	10/15/21	-30	-5	43	44	2.3	-30	-5	10/21/21 08:47	10/21/21 10:47
SV-6	CJ63031	12858	6.0L	3250	10/15/21	-30	-5	43	43	0.0	-30	-6	10/21/21 12:20	10/21/21 14:20

Criteria: None

State: NY

SampNo      Acode      Phoenix Analyte

# Sample Criteria Exceedances Report

## GCJ63027 - GZA-NY

\*\*\* No Data to Display \*\*\*



Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

## Organic Data Flags

LOD(MDL): Limit of Detection or Method Detection Limit  
The minimum reportable concentration that can be measured with confidence.

PQL(RL): Practical Quantitation Level or Reporting Level  
This value is at or above the MDL and is supported by the lowest calibration standard.

- Q Qualifiers:
  - U - The compound was analyzed for but not detected at or above the MDL. The number immediately preceding the "U" represents the PQL reporting level corrected for percent solids, weight and/or volume calculations, and dilution factors.
  - J - Indicates an estimated value, may indicate one of the following, depending on the situation:
    - a) The reported value is estimated and below the RL.  
Compounds that are detected above MDL but below RL are qualified with a J flag.
    - b) Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the identification criteria, but the results is less than the quantitation limit, but greater than zero.
    - c) QC associated with this analyte is within warning limits.
  - X - The concentration is not reported. This quantitation file was not evaluated for this compound at this dilution; a volatile purging or related issue may be the cause.
- L - Biased Low
- N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified.
- S - This compound is a solvent that is used in the laboratory. Laboratory contamination is suspected if concentration is less than five times the reporting level.
- B - This compound was also present in the method blank
- D - The reported concentration is the result of a diluted analysis. Samples that require dilution may result in elevated reporting limits that exceed requested criteria for one or more analytes.
- E - The reported value is estimated because the concentration exceeded the calibration range.
- A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.
- Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.
- P - Percent difference is greater than 25% between the two GC columns and the lower result is reported.



**Environmental Laboratories, Inc.**

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823



SDG: GCJ63027

## Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 586 RIVER AVENUE, GZA GeoEnvironmental, Inc.

---

Form 1 (Analysis):

Detailed reference spectra will print "below cal" for the full scan compounds that are reported from the SIM and are below the lowest calibration point in the full scan analysis.

Form 2 (Surrogates):

All surrogates met criteria with the following exceptions: None.



Form 3 (Laboratory Control/Matrix Spike):

Sample: CJ61772 LCS

All LCS recoveries met criteria with the following exceptions: None.

Sample: CJ63030 LCS

All LCS recoveries met criteria with the following exceptions: None.



Sample: CJ63844 LCS

All LCS recoveries met criteria with the following exceptions: None.



Form 4 (Method Blank):

File: CHEM20 1021\_07.D

All compounds were non-detect with the following exceptions: None.

File: CHEM20 1022\_06.D

All compounds were non-detect with the following exceptions: None.

File: CHEM24 1025\_06.D

All compounds were non-detect with the following exceptions: None.



Form 5 (Tune):

File: CHEM20 1012\_05.D

All Tune criteria was met with the following exceptions: None.

File: CHEM20 1021\_01.D

All Tune criteria was met with the following exceptions: None.



File: CHEM20 1022\_02.D

All Tune criteria was met with the following exceptions: None.

File: CHEM24 1012\_04.D

All Tune criteria was met with the following exceptions: None.

File: CHEM24 1025\_02.D

All Tune criteria was met with the following exceptions: None.



Form 6 (Initial Calibration):

---



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SDG: GCJ63027

## Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 586 RIVER AVENUE, GZA GeoEnvironmental, Inc.

Calibration: CHEM20 10/12/21 - 10/13/21

100% of method compounds met criteria.

The following compounds did not meet maximum % deviations: None.



Calibration: CHEM24 10/12/21 - 10/13/21

100% of method compounds met criteria.

The following compounds did not meet maximum % deviations: None.



Form 7 (Continuing Calibration):

File: CHEM20\_1021\_01.D (Opening)

99% of method compounds met criteria.

The following compounds did not meet maximum % deviations: 1,2,4-Trichlorobenzene 37.0% (20), 1,2,4-Trichlorobenzene(sim) 30.0% (20)

File: CHEM20\_1022\_02.D (Opening)

99% of method compounds met criteria.

The following compounds did not meet maximum % deviations: Ethanol -38.7% (30), 1,2,4-Trichlorobenzene 36.0% (20), 1,2,4-Trichlorobenzene(sim) 29.0% (20)



File: CHEM24\_1025\_02.D (Opening)

100% of method compounds met criteria.

The following compounds did not meet maximum % deviations: None.

Form 8 (Internal Standard and Retention Time):

File: CHEM20 - 20\_AIR\_1012.M / 1021\_01.D Full

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM20 - 20\_AIR\_1012.M / 1021\_01.D Sim

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM20 - 20\_AIR\_1012.M / 1022\_02.D Full

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM20 - 20\_AIR\_1012.M / 1022\_02.D Sim

All samples met internal standard area and retention time critieria with the following exceptions: None.



File: CHEM20 - 20\_AIR\_1012.M / Average Full

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM20 - 20\_AIR\_1012.M / Average Sim

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM24 - 24AIR\_1012.M / 1025\_02.D Full

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM24 - 24AIR\_1012.M / 1025\_02.D Sim

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM24 - 24AIR\_1012.M / Average Full



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SDG: GCJ63027

## Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 586 RIVER AVENUE, GZA GeoEnvironmental, Inc.

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM24 - 24AIR\_1012.M / Average Sim

All samples met internal standard area and retention time critieria with the following exceptions: None.

08/08/22

Alejandro Paredes  
Project Manager





**Environmental Laboratories, Inc.**  
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Tel. (860) 645-1102 Fax (860) 645-0823

## NY Analytical Services Protocol Format

September 29, 2022

SDG I.D.: GCJ61984

GZA GeoEnvironmental, Inc. 586 RIVER AVENUE BRONX NY

### Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CJ61984	Volatiles (TO15)	10/20/21	10/21/21	10/21/21	KCA	Y
CJ61985	Volatiles (TO15)	10/20/21	10/21/21	10/21/21	KCA	Y





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## Sample Id Cross Reference

September 29, 2022

SDG I.D.: GCJ61984

Project ID: 586 RIVER AVENUE BRONX NY

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Client Id	Lab Id	Matrix
IA-1	CJ61984	AIR
OA-1	CJ61985	AIR



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
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# Canister Sampling Information

September 29, 2022

FOR: Attn: Matthew DelBalzo  
GZA GeoEnvironmental, Inc.  
104 West 29th Street 10th Floor  
NY, NY 10001

Location Code: GZA-NY

SDG I.D.: GCJ61984

Project ID: 586 RIVER AVENUE BRONX NY

Client Id	Lab Id	Canister		Reg. Id	Chk Out Date	Laboratory					Field				
		Id	Type			Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date	
IA-1	CJ61984	28553	6.0L	2875	10/15/21	-30	-3	43	46	6.7	-30	-5	10/20/21 10:28	10/20/21 12:28	✓
OA-1	CJ61985	19732	6.0L	5353	10/15/21	-30	-4	43	45	4.5	-30	-5	10/20/21 10:47	10/20/21 12:45	✓

Thursday, September 29, 2022

Page 1 of 1

Criteria: None

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
*** No Data to Display ***								

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## Organic Data Flags

LOD(MDL): Limit of Detection or Method Detection Limit  
The minimum reportable concentration that can be measured with confidence.

PQL(RL): Practical Quantitation Level or Reporting Level  
This value is at or above the MDL and is supported by the lowest calibration standard.

- Q Qualifiers:
  - U - The compound was analyzed for but not detected at or above the MDL. The number immediately preceding the "U" represents the PQL reporting level corrected for percent solids, weight and/or volume calculations, and dilution factors.
  - J - Indicates an estimated value, may indicate one of the following, depending on the situation:
    - a) The reported value is estimated and below the RL.  
Compounds that are detected above MDL but below RL are qualified with a J flag.
    - b) Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the identification criteria, but the results is less than the quantitation limit, but greater than zero.
    - c) QC associated with this analyte is within warning limits.
  - X - The concentration is not reported. This quantitation file was not evaluated for this compound at this dilution; a volatile purging or related issue may be the cause.
- L - Biased Low
- N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified.
- S - This compound is a solvent that is used in the laboratory. Laboratory contamination is suspected if concentration is less than five times the reporting level.
- B - This compound was also present in the method blank
- D - The reported concentration is the result of a diluted analysis. Samples that require dilution may result in elevated reporting limits that exceed requested criteria for one or more analytes.
- E - The reported value is estimated because the concentration exceeded the calibration range.
- A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.
- Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.
- P- Percent difference is greater than 25% between the two GC columns and the lower result is reported.



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SDG: GCJ61984

## Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 586 RIVER AVENUE BRONX NY, GZA GeoEnvironmental, Inc.

### Form 1 (Analysis):

Detailed reference spectra will print "below cal" for the full scan compounds that are reported from the SIM and are below the lowest calibration point in the full scan analysis. 

### Form 2 (Surrogates):

All surrogates met criteria with the following exceptions: None. 

### Form 3 (Laboratory Control/Matrix Spike):

Sample: CJ60437 LCS

All LCS recoveries met criteria with the following exceptions: Isopropylalcohol 131% 

### Form 4 (Method Blank):

File: CHEM24 1020\_06.D

All compounds were non-detect with the following exceptions: None. 

### Form 5 (Tune):

File: CHEM24 1012\_04.D

All Tune criteria was met with the following exceptions: None. 

File: CHEM24 1020\_02.D

All Tune criteria was met with the following exceptions: None. 

### Form 6 (Initial Calibration):

Calibration: CHEM24 10/12/21 - 10/13/21

100% of method compounds met criteria.

The following compounds did not meet maximum % deviations: None. 

### Form 7 (Continuing Calibration):

File: CHEM24 1020\_02.D (Opening)

100% of method compounds met criteria.

The following compounds did not meet maximum % deviations: None. 

### Form 8 (Internal Standard and Retention Time):

File: CHEM24 - 24AIR\_1012.M / 1020\_02.D Full

All samples met internal standard area and retention time critieria with the following exceptions: None. 

File: CHEM24 - 24AIR\_1012.M / 1020\_02.D Sim

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM24 - 24AIR\_1012.M / Average Full

All samples met internal standard area and retention time critieria with the following exceptions: None.



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SDG: GCJ61984

## Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 586 RIVER AVENUE BRONX NY, GZA GeoEnvironmental, Inc.

File: CHEM24 - 24AIR\_1012.M / Average Sim

All samples met internal standard area and retention time critieria with the following exceptions: None.



08/05/22

Alejandro Paredes

Project Manager



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

## NY Analytical Services Protocol Format

September 09, 2022

SDG I.D.: GCJ63992

GZA GeoEnvironmental, Inc. 586 RIVER AVENUE 41-0162951-00

### Laboratory Chronicle

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CJ63992	Volatiles (TO15)	10/22/21	10/23/21	10/23/21	KCA	Y
CJ63993	Volatiles (TO15)	10/22/21	10/23/21	10/23/21	KCA	Y
CJ63994	Volatiles (TO15)	10/22/21	10/23/21	10/23/21	KCA	Y



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## Sample Id Cross Reference

September 09, 2022

SDG I.D.: GCJ63992

Project ID: 586 RIVER AVENUE 41-0162951-00

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Client Id	Lab Id	Matrix
SV-1	CJ63992	AIR
SV-2	CJ63993	AIR
SV-3	CJ63994	AIR



## Environmental Laboratories, Inc.

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# Canister Sampling Information

September 09, 2022

FOR: Attn: Reinbill Maniquez  
GZA GeoEnvironmental, Inc.  
104 West 29th Street 10th Floor  
NY, NY 10001

Location Code: GZA-NY

SDG I.D.: GCJ63992

Project ID: 586 RIVER AVENUE 41-0162951-00

Client Id	Lab Id	Canister		Reg. Id	Chk Out Date	Laboratory					Field			
		Id	Type			Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
SV-1	CJ63992	469	6.0L	3258	10/15/21	-30	-5	43	43	0.0	-30	-5	10/22/21 08:12	10/22/21 10:12
SV-2	CJ63993	28581	6.0L	3264	10/15/21	-30	-6	43	44	2.3	-30	-7	10/22/21 12:06	10/22/21 13:58
SV-3	CJ63994	23348	6.0L	5394	10/15/21	-30	-5	43	44	2.3	-30	-5	10/21/21 13:10	10/21/21 15:10

listed elsewhere  
throughout package and  
EDD as 10/22/21 - the  
22nd aligns with the rest  
of the samples in this  
package

Friday, September 09, 2022

Page 1 of 1

Criteria: None

State: NY

## Sample Criteria Exceedances Report

GCJ63992 - GZA-NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
*** No Data to Display ***								

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

## Organic Data Flags

LOD(MDL): Limit of Detection or Method Detection Limit  
The minimum reportable concentration that can be measured with confidence.

PQL(RL): Practical Quantitation Level or Reporting Level  
This value is at or above the MDL and is supported by the lowest calibration standard.

- Q Qualifiers:
  - U - The compound was analyzed for but not detected at or above the MDL. The number immediately preceding the "U" represents the PQL reporting level corrected for percent solids, weight and/or volume calculations, and dilution factors.
  - J - Indicates an estimated value, may indicate one of the following, depending on the situation:
    - a) The reported value is estimated and below the RL.  
Compounds that are detected above MDL but below RL are qualified with a J flag.
    - b) Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the identification criteria, but the results is less than the quantitation limit, but greater than zero.
    - c) QC associated with this analyte is within warning limits.
  - X - The concentration is not reported. This quantitation file was not evaluated for this compound at this dilution; a volatile purging or related issue may be the cause.
- L - Biased Low
- N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified.
- S - This compound is a solvent that is used in the laboratory. Laboratory contamination is suspected if concentration is less than five times the reporting level.
- B - This compound was also present in the method blank
- D - The reported concentration is the result of a diluted analysis. Samples that require dilution may result in elevated reporting limits that exceed requested criteria for one or more analytes.
- E - The reported value is estimated because the concentration exceeded the calibration range.
- A - Indicates that the tentatively identified compound is a suspected aldol condensation product.  
Aldol condensation products are produced during the extraction process.
- Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.
- P - Percent difference is greater than 25% between the two GC columns and the lower result is reported.



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SDG: GCJ63992

## Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 586 RIVER AVENUE 41-0162951-00, GZA GeoEnvironmental, Inc.

Form 1 (Analysis):

Detailed reference spectra will print "below cal" for the full scan compounds that are reported from the SIM and are below the lowest calibration point in the full scan analysis.

Form 2 (Surrogates):

All surrogates met criteria with the following exceptions: None.

Form 3 (Laboratory Control/Matrix Spike):

Sample: CJ63030 LCS

All LCS recoveries met criteria with the following exceptions: None.

Form 4 (Method Blank):

File: CHEM20 1022\_06.D

All compounds were non-detect with the following exceptions: None.

Form 5 (Tune):

File: CHEM20 1012\_05.D

All Tune criteria was met with the following exceptions: None.

File: CHEM20 1022\_02.D

All Tune criteria was met with the following exceptions: None.

Form 6 (Initial Calibration):

Calibration: CHEM20 10/12/21 - 10/13/21

100% of method compounds met criteria.

The following compounds did not meet maximum % deviations: None.

Calibration: CHEM20 10/12/21 - 10/13/21

100% of method compounds met criteria.

The following compounds did not meet maximum % deviations: None.

Form 7 (Continuing Calibration):

File: CHEM20 1022\_02.D (Opening)

99% of method compounds met criteria.

The following compounds did not meet maximum % deviations: Ethanol -38.7% (30), 1,2,4-Trichlorobenzene 36.0% (20), 1,2,4-Trichlorobenzene(sim) 29.0% (20)

Form 8 (Internal Standard and Retention Time):

File: CHEM20 - 20\_AIR\_1012.M / 1022\_02.D Full

All samples met internal standard area and retention time critieria with the following exceptions: None.



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SDG: GCJ63992

## Volatile Air Conformance / Non-Conformance Summary

Project ID / Client ID: 586 RIVER AVENUE 41-0162951-00, GZA GeoEnvironmental, Inc.

---

File: CHEM20 - 20\_AIR\_1012.M / 1022\_02.D Sim

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM20 - 20\_AIR\_1012.M / Average Full

All samples met internal standard area and retention time critieria with the following exceptions: None.

File: CHEM20 - 20\_AIR\_1012.M / Average Sim

All samples met internal standard area and retention time critieria with the following exceptions: None.

08/08/22

Alejandro Paredes

Project Manager

