



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Dr., Diamond Bar, CA 91765-4182**

**MONITORING AND ANALYSIS  
REPORT OF LABORATORY ANALYSIS**

(Page 1 of 7)

**To:** Sumner Wilson  
Monitoring Operations Manager  
Science & Technology Advancement

**Laboratory No.** 2104112-01  
**Requested By** Sumner Wilson  
**Rule No.** NA  
**ST No.** NA  
**Report Created** 02/16/2021

**Sampling Location**  
Northwood High School  
4515 Portola Pkwy  
Irvine, CA

---

**ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS, AND RESULTS**

**Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS)  
Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS) - Tentatively  
Identified**

**See attached results and sample information.**

**Reviewed By:** \_\_\_\_\_  
Stephen Dutz  
Principal A.Q. Chemist  
Laboratory Services

**Date Reviewed:** \_\_\_\_\_

**Approved By:** \_\_\_\_\_  
Aaron Katzenstein, Ph.D.  
Senior Manager  
Laboratory Services  
(909) 396-2219

**Date Approved:** \_\_\_\_\_



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**21865 Copley Dr., Diamond Bar, CA 91765-4182**

**MONITORING AND ANALYSIS**  
**REPORT OF LABORATORY ANALYSIS**

(Page 2 of 7)

**Laboratory No.** 2104112-01  
**Sample Description** 24 Hour, SILCO Canister E5223, AA Asphalt Irvine: Northwood High School.  
**Sample Comments** Note secondary TO-15 calibration standard was expired at time of analysis.  
**Sample Date 02/09/2021** **Received Date 02/10/2021** **Analyzed Date 02/10/2021**

**Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS)**

<u>Analyte, Unit</u>	<u>Result</u>	<u>MDL</u>	<u>MRL</u>	<u>Ambient Avg</u>
1,1,1-Trichloroethane, ppbv	ND	0.009	0.03	0.1
1,1,1,2-Tetrachloroethane, ppbv	ND	0.02	0.07	<0.1
1,1,2-Trichloroethane, ppbv	ND	0.03	0.09	<0.1
1,1-Dichloroethane, ppbv	ND	0.01	0.04	<0.1
1,1-Dichloroethylene, ppbv	ND	0.03	0.09	
1,2,4-Trichlorobenzene, ppbv	ND	0.08	0.2	<0.1
1,2,4-Trimethylbenzene, ppbv	<i>J (0.03)</i>	0.02	0.05	0.1
1,2-Dibromoethane, ppbv	ND	0.02	0.08	
1,2-Dichlorobenzene, ppbv	ND	0.04	0.1	
1,2-Dichloroethane, ppbv	<i>J (0.02)</i>	0.01	0.04	
1,2-Dichloropropane, ppbv	ND	0.01	0.03	<0.1
1,3,5-Trimethylbenzene, ppbv	ND	0.03	0.1	0.1
1,3-Butadiene, ppbv	ND	0.03	0.08	<0.1
1,3-Dichlorobenzene, ppbv	ND (QX)	0.03	0.1	
1,4-Dichlorobenzene, ppbv	ND (QX)	0.04	0.1	
1,4-Dioxane, ppbv	ND (QX)	0.04	0.1	<0.1
2-Butanone (MEK), ppbv	<i>J (0.1)</i>	0.06	0.2	0.3
2-Hexanone (MBK), ppbv	ND	0.05	0.1	
2-Propenal, ppbv	<i>J (0.06)</i>	0.05	0.2	
Acetone, ppbv	2.2	0.3	0.9	7.7
Benzene, ppbv	0.09	0.01	0.03	0.6
Benzyl chloride, ppbv	ND (QX)	0.03	0.08	<0.1
Bromodichloromethane, ppbv	ND	0.01	0.04	<0.1
Bromoform, ppbv	ND	0.04	0.1	<0.1
Bromomethane, ppbv	ND	0.03	0.08	<0.1
Carbon disulfide, ppbv	ND	0.04	0.1	<0.1
Carbon Tetrachloride, ppbv	0.08	0.009	0.03	0.1
Chlorobenzene, ppbv	ND	0.02	0.05	<0.1
Chloroethane, ppbv	ND	0.02	0.06	<0.1
Chloroform, ppbv	0.02	0.008	0.02	<0.1
Chloromethane, ppbv	0.5	0.03	0.08	0.6



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**21865 Copley Dr., Diamond Bar, CA 91765-4182**

**MONITORING AND ANALYSIS**  
**REPORT OF LABORATORY ANALYSIS**

(Page 3 of 7)

**Laboratory No.** 2104112-01 - continued  
**Sample Description** 24 Hour, SILCO Canister E5223, AA Asphalt Irvine: Northwood High School.  
**Sample Comments** Note secondary TO-15 calibration standard was expired at time of analysis.  
**Sample Date 02/09/2021** **Received Date 02/10/2021** **Analyzed Date 02/10/2021**

**Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS)**

<u>Analyte, Unit</u>	<u>Result</u>	<u>MDL</u>	<u>MRL</u>	<u>Ambient Avg</u>
cis-1,2-Dichloroethylene, ppbv	ND	0.01	0.04	
cis-1,3-Dichloropropene, ppbv	ND	0.03	0.1	
Cyclohexane, ppbv	J (0.01)	0.01	0.03	0.1
Dibromochloromethane, ppbv	ND	0.03	0.08	<0.1
Dichlorodifluoromethane (Freon 12), ppbv	0.4	0.03	0.09	0.5
Dichlorotetrafluoroethane (Freon 114), ppbv	J (0.02)	0.02	0.06	<0.1
Ethanol, ppbv	5.8 (LJ)	0.3	0.9	7.3
Ethyl Acetate, ppbv	ND	0.08	0.2	<0.1
Ethylbenzene, ppbv	J (0.03)	0.02	0.07	0.2
Ethylene oxide, ppbv	0.06	0.02	0.06	
Hexachloro-1,3-butadiene, ppbv	ND	0.07	0.2	
Isopropanol, ppbv	ND (QX)	0.3	0.9	
m+p-Xylene, ppbv	J (0.06)	0.04	0.1	0.6
Methyl Isobutyl Ketone (MIBK), ppbv	ND	0.06	0.2	
Methyl Methacrylate, ppbv	ND	0.05	0.2	
Methyl tert-Butyl Ether (MTBE), ppbv	ND	0.02	0.07	
Methylene Chloride, ppbv	0.1	0.02	0.07	0.2
n-Heptane, ppbv	ND (QX)	0.04	0.1	0.2
n-Hexane, ppbv	0.04	0.01	0.04	0.1
o-Xylene, ppbv	ND	0.08	0.2	0.2
p-Ethyltoluene, ppbv	J (0.02)	0.02	0.06	
Propylene, ppbv	J (0.05)	0.04	0.1	0.5
Styrene, ppbv	J (0.03)	0.02	0.06	0.1
Tetrachloroethylene, ppbv	ND	0.02	0.06	
Tetrahydrofuran, ppbv	ND	0.03	0.1	<0.1
Toluene, ppbv	0.1	0.03	0.1	1.6
trans-1,2-Dichloroethylene, ppbv	ND	0.02	0.05	
trans-1,3-Dichloropropene, ppbv	ND	0.03	0.08	
Trichloroethylene, ppbv	ND	0.01	0.04	<0.2
Trichlorofluoromethane (Freon 11), ppbv	0.2	0.02	0.06	0.2
Trichlorotrifluoroethane (Freon 113), ppbv	0.06	0.01	0.04	0.1



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**21865 Copley Dr., Diamond Bar, CA 91765-4182**

**MONITORING AND ANALYSIS**  
**REPORT OF LABORATORY ANALYSIS**

(Page 4 of 7)

**Laboratory No.** 2104112-01 - continued  
**Sample Description** 24 Hour, SILCO Canister E5223, AA Asphalt Irvine: Northwood High School.  
**Sample Comments** Note secondary TO-15 calibration standard was expired at time of analysis.  
**Sample Date 02/09/2021** **Received Date 02/10/2021** **Analyzed Date 02/10/2021**

---

**Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS)**

<u>Analyte, Unit</u>	<u>Result</u>	<u>MDL</u>	<u>MRL</u>	<u>Ambient Avg</u>
Vinyl acetate, ppbv	ND	0.08	0.2	<0.1
Vinyl chloride, ppbv	ND	0.02	0.07	<0.1



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**21865 Copley Dr., Diamond Bar, CA 91765-4182**

**MONITORING AND ANALYSIS**  
**REPORT OF LABORATORY ANALYSIS**

(Page 5 of 7)

**Laboratory No.** 2104112-01 - continued  
**Sample Description** 24 Hour, SILCO Canister E5223, AA Asphalt Irvine: Northwood High School.  
**Sample Comments** Note secondary TO-15 calibration standard was expired at time of analysis.  
**Sample Date 02/09/2021** **Received Date 02/10/2021** **Analyzed Date 02/11/2021**

---

**Volatile Organic Compounds (VOCs) in Ambient Air by EPA TO-15 (GC/MS) - Tentatively Identified**

**--TENTATIVELY IDENTIFIED COMPOUNDS--**  
**CONCENTRATIONS ARE APPROXIMATED**

<u>Analyte, Unit</u>	<u>Result</u>
No TICs Found, ppbv	0.0



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**21865 Copley Dr., Diamond Bar, CA 91765-4182**

**MONITORING AND ANALYSIS**  
**REPORT OF LABORATORY ANALYSIS**

(Page 6 of 7)

**Laboratory No. 2104112-01**

**DEFINITIONS**

<b>Item</b>	<b>Definition</b>
MDL	Method Detection Limit
MRL	Method Reporting Limit
ND	Non-detect; Value is below MDL.
J	Value is between method detection and reporting limits.
LJ	Identification of Analyte is Acceptable; Reported Value is an Estimate
QX	Does not meet QC criteria.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
SAMPLE ANALYSIS REQUEST**

- DISTRICT INFORMATION
- INVOICE SOURCE
- LAP AUDIT

LABORATORY NO 2104112

TO: SCAQMD LAB:  OTHER:  \_\_\_\_\_  
 SOURCE NAME: AAA Asphalt I.D. No. \_\_\_\_\_  
 Source Address: 4515 Portola Pkwy City: Irvine  
 Mailing Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: 92620  
 Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_ Tel: \_\_\_\_\_

Analysis Requested by: Sumner Wilson Date: 02/10/21  
 Approved by: Jason Low Office: \_\_\_\_\_ Budget #: 44716  
 REASON REQUESTED: Court/Hearing Board  Permit Pending  Hazardous/Toxic Spill   
 Suspected Violation Rule(s) \_\_\_\_\_ Other  near source monitoring

Sample Collected by: J Caldero Date: 02/10/21 Time: 0940 pst

**REQUESTED ANALYSIS:**

Location	Can#	Start day / time / duration	Start vac	End vac
Northwood High School	E5223	02/09/21 / 00:00 / 1438 min	-30" Hg	-3"Hg

Relinquished by	Received by	Firm/Agency	Date	Time
J Caldero	shelf	SCAQMD Lab	02/10/21	11:00 AM
Shelf	R. Lopez	SCAQMD Lab	02/10/21	11:16

**Remarks:**

SN #585 Orfice 274 box #3

AAA Asphalt Irvine: Northwood High School