

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

MONITORING & ANALYSIS
REPORT OF LABORATORY ANALYSIS

TO: Jason Low, Ph.D.
Atmospheric Measurements Manager
Science and Technology Advancement

LABORATORY NO: 1616627

REFERENCE NO: GC6-121-100

SAMPLE DESCRIPTION:
Grab samples
Canister #s 54766 E0301
54322 E5734

DATE SAMPLED: 06/14/16

DATE RECEIVED: 06/16/16

DATE ANALYZED: 06/16/16

SAMPLE LOCATION:
Maywood Fire

ANALYZED BY: Yang Song


REQUESTED BY: Sumner Wilson

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

Volatile Organic Compounds (VOC) by Gas Chromatography(GC)
and Flame Ionization Detection (FID)

- Notes:
1. Sample canister E5734 was invalid due to a lose cap and valve that was cracked open.
 2. See attached for speciated results.

Date Approved: 6/23/16

Approved By: 

Solomon Teffera, Acting Sr. Manager
Laboratory Services Branch
(909) 396-2199

LAB NO: 1616627
Location: Maywood Fire

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

Quantitation of Organic Compounds by Gas Chromatography(GC) and
 Flame Ionization Detection (FID)

Sample Date	06/14/16	06/14/16	
Canister	54766	E0301	
Sampling Location	Fruitland Ave.	52nd Street	Ambient Air
Sampling Time	8:45 AM	10:25 AM	
Total NMOC, ppbC	10400	120	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethane	180	4.7	
ethylene	580	1.4	0.7-4.1
acetylene	130	1.0	
propane	47	3.2	0.4-5.0
propylene	200	0.3	0.2-0.7
isobutane	2.5	0.6	0.2-0.9
n-butane	13	0.8	0.3-1.7
1-butene	31	<0.1	0.1-0.3
trans-2-butene	11	<0.1	
cis-2-butene	7.5	<0.1	
isopentane	11	2.7	
1-pentene	8.9	<0.1	
n-pentane	14	0.5	0.1-0.6
isoprene	14	<0.1	
trans-2-pentene	3.6	<0.1	
cis-2-pentene	1.9	<0.1	
2,2-dimethylbutane	1.6	<0.1	
cyclopentane	0.8	<0.1	
2,3-dimethylbutane	<0.1	0.1	
2-methylpentane	1.2	0.3	
3-methylpentane	0.4	0.2	
1-hexene	8.4	<0.1	<0.1-0.1
n-hexane	4.6	0.7	0.1-0.2
methylcyclopentane	1.3	0.2	
2,4-dimethylpentane	0.6	<0.1	
benzene	250	0.3	0.1-0.5
cyclohexane	0.5	<0.1	
2-methylhexane	0.3	<0.1	
2,3-dimethylpentane	0.1	0.1	
3-methylhexane	1.6	0.1	
2,2,4-trimethylpentane	2.8	0.2	

LAB NO: 1616627
Location: Maywood Fire

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

Quantitation of Organic Compounds by Gas Chromatography(GC) and
 Flame Ionization Detection (FID)

Sample Date	06/14/16	06/14/16	
Canister	54766	E0301	
Sampling Location	Fruitland Ave.	52nd Street	Ambient Air
Sampling Time	8:45 AM	10:25 AM	
Total NMOC, ppbC	10400	120	100-700 ppbC
<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
n-heptane	5.2	1.1	0.1-0.2
methylcyclohexane	0.6	<0.1	
2,3,4-trimethylpentane	0.2	<0.1	
toluene	89	0.6	0.1-0.6
2-methylheptane	0.3	<0.1	
3-methylheptane	1.4	<0.1	
n-octane	0.7	0.9	<0.1-0.3
ethylbenzene	37	0.2	0.1-0.2
m+p-xylenes	10	0.3	0.1-0.2
styrene	210	0.5	<0.1-0.2
o-xylene	4.4	0.1	0.1-0.2
n-nonane	1.4	<0.1	<0.1-0.1
isopropylbenzene	4.9	<0.1	
n-propylbenzene	1.1	<0.1	
m-ethyltoluene	1.2	<0.1	
p-ethyltoluene	1.2	<0.1	
1,3,5-trimethylbenzene	0.4	<0.1	
o-ethyltoluene	1.5	<0.1	
1,2,4-trimethylbenzene	1.6	<0.1	
n-decane	1.3	<0.1	<0.1-0.1
1,2,3-trimethylbenzene	0.1	<0.1	
m-diethylbenzene	5.3	<0.1	
p-diethylbenzene	0.8	<0.1	
n-undecane	1.3	<0.1	<0.1
n-dodecane	0.8	<0.1	<0.1

NMOC = Non-Methane Organic Compounds

N.D. = Not Detected

LAB NO: 1616627
Location: Maywood Fire

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

Quantitation of Organic Compounds by Gas Chromatography(GC) and
 Flame Ionization Detection (FID)

Sample Date	06/14/16	
Canister	54322	
Sampling Location	1000 ft NW of event	Ambient Air
Sampling Time	9:42 AM	
Total NMOC, ppbC	250	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
ethane	7.1	
ethylene	9.4	0.7-4.1
acetylene	4.0	
propane	6.0	0.4-5.0
propylene	2.9	0.2-0.7
isobutane	0.8	0.2-0.9
n-butane	1.2	0.3-1.7
1-butene	0.4	0.1-0.3
trans-2-butene	0.1	
cis-2-butene	<0.1	
isopentane	2.8	
1-pentene	0.1	
n-pentane	0.9	0.1-0.6
isoprene	0.1	
trans-2-pentene	<0.1	
cis-2-pentene	<0.1	
2,2-dimethylbutane	<0.1	
cyclopentane	<0.1	
2,3-dimethylbutane	<0.1	
2-methylpentane	0.2	
3-methylpentane	0.2	
1-hexene	0.1	<0.1-0.1
n-hexane	1.6	0.1-0.2
methylcyclopentane	0.2	
2,4-dimethylpentane	<0.1	
benzene	4.2	0.1-0.5
cyclohexane	0.2	
2-methylhexane	<0.1	
2,3-dimethylpentane	<0.1	
3-methylhexane	0.1	
2,2,4-trimethylpentane	0.1	

LAB NO: 1616627
Location: Maywood Fire

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS

Quantitation of Organic Compounds by Gas Chromatography(GC) and
Flame Ionization Detection (FID)

Sample Date	06/14/16	
Canister	54322	
Sampling Location	1000 ft NW of event	Ambient Air
Sampling Time	9:42 AM	
Total NMOC, ppbC	250	100-700 ppbC

<u>Compound</u>	<u>Conc. (ppbv)</u>	<u>Conc. (ppbv)</u>
n-heptane	1.7	0.1-0.2
methylcyclohexane	<0.1	
2,3,4-trimethylpentane	<0.1	
toluene	1.8	0.1-0.6
2-methylheptane	<0.1	
3-methylheptane	<0.1	
n-octane	0.7	<0.1-0.3
ethylbenzene	0.9	0.1-0.2
m+p-xylenes	0.6	0.1-0.2
styrene	2.3	<0.1-0.2
o-xylene	0.5	0.1-0.2
n-nonane	<0.1	<0.1-0.1
isopropylbenzene	<0.1	
n-propylbenzene	<0.1	
m-ethyltoluene	<0.1	
p-ethyltoluene	<0.1	
1,3,5-trimethylbenzene	<0.1	
o-ethyltoluene	<0.1	
1,2,4-trimethylbenzene	0.2	
n-decane	<0.1	<0.1-0.1
1,2,3-trimethylbenzene	<0.1	
m-diethylbenzene	<0.1	
p-diethylbenzene	<0.1	
n-undecane	<0.1	<0.1
n-dodecane	<0.1	<0.1

NMOC = Non-Methane Organic Compounds

N.D. = Not Detected

* Sample canister cap was lose and valve was cracked open.

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

DISTRICT INFORMATION
 INVOICE SOURCE
 LABORATORY NO. **1616627**

TO: _____ OTHER: _____
 SOURCE NAME: Maywood Fire I.D. No. _____
 Source Address: _____ City: Maywood
 Mailing Address: _____ City: _____ Zip: 90270
 Contact Person: Solomon Teffera Title: Acting Senior Manager Tel: 909-396-2180

Analysis Requested by: Jason Low Date: 6/14/16
 Approved by: Jason Low Office: Emergency Response Budget #: _____
 REASON REQUESTED: Court/Hearing Board Permit Pending Hazardous/Toxic Spill
 Suspected Violation Rule(s) _____ Other Emergency Response _____

Sample Collected by: Various, see sample description Date: 6/14/16 Time: See sample description

Sample Description:

	Container	#	Collection Date/ Time	Collected By	Comments
-01	SUMMA Canister	54766	6/14/16 8:45am	Terry Wilkinson	Plume in front of 3570 Fruitland Ave, Maywood
-02	SUMMA Canister	E0301	6/14/16 10:25am	Larry Israel	3550 52 nd St, Maywood
-03	SUMMA Canister	54322	6/14/16 9:42 am	Robert Wimmer	1000 ft NNW of event
-04	SUMMA Canister	E5734	6/14/16 11:35am	Robert Wimmer	60 ft east of event
-05	Glass Plate	PM 149	6/14/16 10:40am	Robert Wimmer	Emergency vehicle 200 ft east of event
-06	Glass Plate	PM 149 Box	6/14/16 10:40am	Robert Wimmer	Emergency vehicle 200 ft east of event
-07	Glass Plate	PM 148	6/14/16 9:40am to 16:48	Robert Wimmer	Approximately 1000 ft NNW of event. Plate was exposed during event
-08	Glass Plate	PM 148 Box	6/14/16 9:40am to 16:48	Robert Wimmer	Approximately 1000 ft NNW of event. Plate was exposed during event
-09	Glass Plate	PM 150	6/14/16 10:55am to 17:20	Larry Israel	3555 52 nd St, Maywood. Cinder block fence adj to driveway on west side of residence

Analysis Requested: SUMMA Canisters For TGNMNEOC, Toxics, and TO-15
 Glass Plate For Metals

-01, -02
-03, 04, 05
-07, 08
09

Relinquished by	Received by	Firm/Agency	Date	Time
Frank B. Davis	[Signature]	LAB	6/14/16	3:43 pm
[Signature]	[Signature]	LAB	6/14/16	3:43 pm
[Signature]	J. Senechal	SUMMA LAB	6/14/16	6:55 pm

Remarks: Please send report to: Jason Low x. 2269

SUMMA Canister E5734 is invalid. The valve was open and the brass cap was loose.

Glass Plate PM 150 is invalid. Insufficient sample on glass plate.



AQMD

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

Monitoring & Analysis

Chain-of-Custody Record for Sampling Equipment

Type: Glass Plates - Metals (Aerosol)

Identification Number: PM148, PM149, PM150, PM151, PM152

Requested by (print name): Summer Wilson

Relinquished by	Received by	Firm/Agency	Date	Time
Sally	Summer Wilson	SCAQMD	4-20-16	0900
He Beddler PM151 PM152	Kelly Vans	CARB	6/15/16	6:30 PM (151 & 152)
He Beddler PM148 PM149 PM150	[Signature]	Lab	6/14/16	6:55 pm