



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

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

(Page 1 of 5)

To: Victor Yip
Sr. Enforcement Manager
Compliance & Enforcement

Laboratory No. 1828301-01
Requested By Kraig Morris
Rule No. R402
ST No. NA
Report Created 11/16/2018

Sampling Location

HB Firestation #8 collected
5292 Glenroy
Huntington Beach, CA 92649

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS, AND RESULTS

Volatile Organic Compounds (VOCs) in Ambient Air by GC/FID

See attached results and sample information.

Reviewed By:

Stephen Dutz
Principal A.Q. Chemist
Laboratory Services

Date Reviewed:

11/16/18

Approved By:

Aaron Katzenstein, Ph.D.
Senior Manager
Laboratory Services
(909) 396-2219

Date Approved:

11/16/2018



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Laboratory No. 1828301-01

Sample Description SUMMA Canister 53418, Sample collected by Hbfd Engine 48 in response to plume odor in area. Strong odor present in area, dissipating upon sample collection but still present. Light NW wind, we approached through plume, most likely on tail end. Plume lasting 5 min or more.

Sample Comments Concentrations of light hydrocarbons exceed GC calibration, and should be viewed as estimates only.

Volatile Organic Compounds (VOCs) in Ambient Air by GC/FID

| <u>Analyte, Unit</u> | <u>Result</u> | <u>MDL</u> | <u>MRL</u> | <u>Ambient Avg</u> |
|---------------------------------|---------------|------------|------------|--------------------|
| Total NMOC, ppbC | 12000 | 1.6 | 4.8 | 100-700 |
| Total Calibrated, ppbC | 11000 | 1.6 | 4.8 | |
| Ethane (FID), ppbv | 370 | 0.8 | 2.4 | |
| Ethylene (FID), ppbv | 2.6 | 0.8 | 2.4 | 0.7-4.1 |
| Acetylene (FID), ppbv | ND | 0.8 | 2.4 | |
| Propane (FID), ppbv | 690 | 0.5 | 1.6 | 0.4-5.0 |
| Propylene (FID), ppbv | 1.2 | 0.5 | 1.6 | 0.2-0.7 |
| Isobutane (FID), ppbv | 180 | 0.4 | 1.2 | 0.2-0.9 |
| n-Butane (FID), ppbv | 610 | 0.4 | 1.2 | 0.3-1.7 |
| 1-Butene (FID), ppbv | 0.8 | 0.4 | 1.2 | 0.1-0.3 |
| trans-2-Butene (FID), ppbv | ND | 0.4 | 1.2 | |
| cis-2-Butene (FID), ppbv | ND | 0.4 | 1.2 | |
| Isopentane (FID), ppbv | 240 | 0.3 | 1.0 | |
| 1-Pentene (FID), ppbv | ND | 0.3 | 1.0 | |
| n-Pentane (FID), ppbv | 310 | 0.3 | 1.0 | 0.1-0.6 |
| Isoprene (FID), ppbv | ND | 0.3 | 1.0 | |
| trans-2-Pentene (FID), ppbv | ND | 0.3 | 1.0 | |
| cis-2-Pentene (FID), ppbv | ND | 0.3 | 1.0 | |
| 2,2-Dimethylbutane (FID), ppbv | 3.0 | 0.3 | 0.8 | |
| Cyclopentane (FID), ppbv | 13 | 0.3 | 1.0 | |
| 2,3-Dimethylbutane (FID), ppbv | 10 | 0.3 | 0.8 | |
| 2-Methylpentane (FID), ppbv | 69 | 0.3 | 0.8 | |
| 3-Methylpentane (FID), ppbv | 41 | 0.3 | 0.8 | |
| 1-Hexene (FID), ppbv | ND | 0.3 | 0.8 | <0.1-0.1 |
| n-Hexane (FID), ppbv | 100 | 0.3 | 0.8 | 0.1-0.2 |
| Methylcyclopentane (FID), ppbv | 22 | 0.3 | 0.8 | |
| 2,4-Dimethylpentane (FID), ppbv | 2.7 | 0.2 | 0.7 | |
| Benzene (FID), ppbv | 9.3 | 0.3 | 0.8 | 0.1-0.5 |
| Cyclohexane (FID), ppbv | 13 | 0.3 | 0.8 | |



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Laboratory No. 1828301-01 - continued

Sample Description SUMMA Canister 53418, Sample collected by HBFD Engine 48 in response to plume odor in area. Strong odor present in area, dissipating upon sample collection but still present. Light NW wind, we approached through plume, most likely on tail end. Plume lasting 5 min or more.

Sample Comments Concentrations of light hydrocarbons exceed GC calibration, and should be viewed as estimates only.

Volatile Organic Compounds (VOCs) in Ambient Air by GC/FID

| <u>Analyte, Unit</u> | <u>Result</u> | <u>MDL</u> | <u>MRL</u> | <u>Ambient Avg</u> |
|------------------------------------|---------------|------------|------------|--------------------|
| 2-Methylhexane (FID), ppbv | 13 | 0.2 | 0.7 | |
| 2,3-Dimethylpentane (FID), ppbv | 5.3 | 0.2 | 0.7 | |
| 3-Methylhexane (FID), ppbv | 15 | 0.2 | 0.7 | |
| 2,2,4-Trimethylpentane (FID), ppbv | 4.0 | 0.2 | 0.6 | |
| n-Heptane (FID), ppbv | 30 | 0.2 | 0.7 | 0.1-0.2 |
| Methylcyclohexane (FID), ppbv | 12 | 0.2 | 0.7 | |
| 2,3,4-Trimethylpentane (FID), ppbv | 0.3 | 0.2 | 0.6 | |
| Toluene (FID), ppbv | 6.8 | 0.2 | 0.7 | 0.1-0.6 |
| 2-Methylheptane (FID), ppbv | 4.8 | 0.2 | 0.6 | |
| 3-Methylheptane (FID), ppbv | 2.8 | 0.2 | 0.6 | |
| n-Octane (FID), ppbv | 7.2 | 0.2 | 0.6 | <0.1-0.3 |
| Ethylbenzene (FID), ppbv | 0.4 | 0.2 | 0.6 | 0.1-0.2 |
| m+p-Xylene (FID), ppbv | 2.5 | 0.2 | 0.6 | 0.1-0.2 |
| Styrene (FID), ppbv | ND | 0.2 | 0.6 | <0.1-0.2 |
| o-Xylene (FID), ppbv | 0.4 | 0.2 | 0.6 | 0.1-0.2 |
| n-Nonane (FID), ppbv | 1.8 | 0.2 | 0.5 | <0.1-0.1 |
| Isopropylbenzene (FID), ppbv | 0.2 | 0.2 | 0.5 | |
| n-Propylbenzene (FID), ppbv | ND | 0.2 | 0.5 | |
| m-Ethyltoluene (FID), ppbv | 0.2 | 0.2 | 0.5 | |
| p-Ethyltoluene (FID), ppbv | ND | 0.2 | 0.5 | |
| 1,3,5-Trimethylbenzene (FID), ppbv | ND | 0.2 | 0.5 | |
| o-Ethyltoluene (FID), ppbv | ND | 0.2 | 0.5 | |
| 1,2,4-Trimethylbenzene (FID), ppbv | ND | 0.2 | 0.5 | |
| n-Decane (FID), ppbv | ND | 0.2 | 0.5 | <0.1-0.1 |
| 1,2,3-Trimethylbenzene (FID), ppbv | ND | 0.2 | 0.5 | |
| m-Diethylbenzene (FID), ppbv | ND | 0.2 | 0.5 | |
| p-Diethylbenzene (FID), ppbv | ND | 0.2 | 0.5 | |
| n-Undecane (FID), ppbv | ND | 0.1 | 0.4 | <0.1 |
| n-Dodecane (FID), ppbv | ND | 0.1 | 0.4 | <0.1 |



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|---------------------------|--|
| Laboratory No. | 1828301-01 - continued |
| Sample Description | SUMMA Canister 53418, Sample collected by HBFD Engine 48 in response to plume odor in area. Strong odor present in area, dissipating upon sample collection but still present. Light NW wind, we approached through plume, most likely on tail end. Plume lasting 5 min or more. |
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Qualifiers

ND = Non-detect

J = Value is between method detection and reporting limits.

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

- DISTRICT INFORMATION
 INVOICE SOURCE
 LAP AUDIT

LABORATORY NO 1828301

TO: SCAQMD LAB: OTHER:
 SOURCE NAME: HB Fire station # 8 collected I.D. No. _____
 Source Address: 5292 GLENROY City: HUNTINGTON BEACH
 Mailing Address: 5891 HEIL ST. City: CA Zip: 926
 Contact Person: CAPTAIN WRIGHT Title: FIRE CAPTAIN Tel: (714) 536-5464

Analysis Requested by: Kraig Morris Date: 10/10/18
 Approved by: FRED GONZALES Office: CPE Budget #: 60375
 REASON REQUESTED: Court/Hearing Board Permit Pending Hazardous/Toxic Spill
 Suspected Violation Rule(s) 402 Other

Sample Collected by: HBFD E48 Date: 9/30/18 Time: 21:31

SAMPLE DESCRIPTION:

SAMPLE COLLECTED BY HBFD ENGINE 48 IN
 RESPONSE TO PLUME ODOR IN AREA. STRONG
 ODOR PRESENT IN AREA, DISSIPATING UPON
 SAMPLE COLLECTION BUT STILL PRESENT.

LIGHT NW WIND, WE APPROACHED THROUGH
 PLUME, MOST LIKELY ON TAIL END. PLUME ^{VOC} ANALYSIS

REQUESTED ANALYSIS: LASTING 25 min. CANISTER 53418

| Relinquished by | Received by | Firm/Agency | Date | Time |
|-----------------------|-----------------------|-------------------|-----------------|--------------|
| <u>Chris Thompson</u> | <u>Kraig Morris</u> | <u>SCAQMD</u> | <u>10/10/18</u> | <u>7:40</u> |
| <u>Kraig Morris</u> | <u>Illiana Garcia</u> | <u>SCAQMD LAB</u> | <u>10/10/18</u> | <u>12:40</u> |

Remarks: