

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

MONITORING & ANALYSIS
REPORT OF LABORATORY ANALYSIS

Page 1 of 2

TO Jason Low
Atmospheric Measurements Manager
Science and Technology Advancement

LABORATORY NO. 1616935-01

FACILITY ID NA

SAMPLE(S) DESCRIBED AS
Triggered Sample
Tedlar Bag 061716-01

DATE RECEIVED 6/17/16

PROJECT/ ST NO/ RULE 402

SAMPLING LOCATION
Highlands Community Center

REQUESTED BY Sumner Wilson

DATE ANALYZED 6/17/16


ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS AND RESULTS
Total Reduced Sulfur (TRS) by SCAQMD Method 307-91

| | Result |
|----------------------------------|-----------------------|
| t-Butyl mercaptan | < 1 ppb ¹ |
| Tetrahydrothiophene (THT) | < 1 ppb ¹ |
| Carbonyl sulfide/SO ₂ | 29 ppb ^{1,2} |
| Unknown | 23 ppb ^{1,2} |
| Total Reduced Sulfur | 51 ppb ^{1,2} |

¹ Calibrated using methyl mercaptan

² Sampler filled bag to < 2 Liters instead of the specified 8 L; pumps contribute contaminant peaks at 2.2 minutes (COS/SO₂) and 8.1 minutes (unknown) that are more pronounced when less sample is collected. Pump contaminants are also more pronounced when the pump is not flushed for long periods of time. An example of this behavior is included on page 2 of this report where the pump used to prepare bag blanks was used to fill a bag without pre-flushing. Total reduced sulfur is <1 ppb if these likely contaminants are discounted. Further testing in the field to be conducted to determine source of peaks.

Date Approved: 6/29/16

Approved By: 
Solomon Teffera, Acting Senior Manager
Laboratory Services
(909) 396-2199

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21865 Copley Dr., Diamond Bar, CA 91765-4182**

**MONITORING & ANALYSIS
REPORT OF LABORATORY ANALYSIS
Page 2 of 2**

SAMPLE(S) DESCRIBED AS
1 Triggered Tedlar Bag

LABORATORY NO. 1616935-01

REQUESTED BY Sumner Wilson

**Total Reduced Sulfur (TRS) by SCAQMD Method 307-91
Quality Control Tests and Results Matrix**

| | Control (ppb) | | | | Lab Air Blank (ppb) |
|---------------------|----------------------|-----------------|-------------------|----------------------|----------------------------|
| | Prepared | Measured | % Recovery | | Measured |
| Methyl Mercaptan | 1.01 | 0.76 | 75.6 | Carbonyl Sulfide/SO2 | 0.7 ¹ |
| Ethyl Mercaptan | 1.04 | 0.84 | 80.8 | Methyl Mercaptan | < 1 |
| Isopropyl Mercaptan | 1.04 | 0.92 | 88.9 | Ethyl Mercaptan | < 1 |
| 1-Propanethiol | 1.03 | 0.90 | 87.4 | Isopropyl Mercaptan | < 1 |
| | | | | 1-Propanethiol | < 1 |

| | Calibration Drift (ppb) | | | | N2 Bag Blank (ppb) |
|---------------------|--------------------------------|-----------------|-------------------|---------------------|---------------------------|
| | Prepared | Measured | % Recovery | | Measured |
| Methyl Mercaptan | 30.15 | 25.2 | 83.6 | Methyl Mercaptan | < 1 |
| Ethyl Mercaptan | 31.20 | 24.74 | 79.3 | Ethyl Mercaptan | < 1 |
| Isopropyl Mercaptan | 31.05 | 25.48 | 82.1 | Isopropyl Mercaptan | < 1 |
| 1-Propanethiol | 30.90 | 24.53 | 79.4 | 1-Propanethiol | < 1 |

| | Unflushed pump (ppb) | |
|---------|-----------------------------|-----------------|
| | Retention Time | Measured |
| Unknown | 2.3 | 23 ¹ |
| Unknown | 8.1 | 2 ¹ |

¹ Calibrated using methyl mercaptan

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

DISTR
 INVOI
 LAP #
 LABOR

1616935



TO: SCAQMD LAB: OTHER:
 SOURCE NAME: Southern California Gas Co. I.D. No. _____
 Source Address: 12801 Tampa Ave City: Porter Ranch
 Mailing Address: _____ City: _____ Zip: 91326
 Contact Person: _____ Title: _____ Tel: _____

Analysis Requested by: Sumner Wilson Date: 6/18/15 16 Q2
 Approved by: Jason Low Office: _____ Budget #: 44716
 REASON REQUESTED: Court/Hearing Board Permit Pending Hazardous/Toxic Spill
 Suspected Violation Rule(s) 402 Other

Sample Collected by: R. Zhou Date: 6/17/16 Time: 11:10 AM

REQUESTED ANALYSIS: Sulfur Analysis

| City/Location | Bag# | Start day | Time | Duration |
|---------------------|-----------|-----------|--------|----------|
| Highlands Community | 061716-01 | 6/17/16 | 7:46am | 5 m |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Relinquished by | Received by | Firm/Agency | Date | Time |
|-----------------|-------------|-------------|----------|---------|
| Zhou | [Signature] | SCAQMD Lab | 06/17/16 | 1:20 PM |
| | | | | |
| | | | | |

Remarks: Samples collected by remote lung sampler, trigger by Thermo 55i sampler

Trigger is set to 5 Q2 35ppm

Highlands community pool parking lot. Address: 12378 High Glen Way, Northridge CA 91326 (across from 12377)