

Atmospheric Analysis & Consulting, Inc.

CLIENT : Eurofins Air Toxics, Inc.
PROJECT NAME : MO DNR – Bridgeton LF
AAC PROJECT NO. : 160667
REPORT DATE : 5/18/2016

On May 16, 2016, Atmospheric Analysis & Consulting, Inc. received two (2) Six-Liter Silonite Canisters for TRS analysis by ASTM D-5504. Upon receipt, each sample was assigned a unique Laboratory ID number as follows:

Client ID	Lab No.	Initial Pressure (mmHg)
D1 (162244)	160667-89826	620.7
U1 (162245)	160667-89827	659.1

ASTM D-5504 Analysis - Up to a 1 mL aliquot of sample is injected into the GC/SCD for analysis following ASTM D-5504 as specified in the SOW.

No problems were encountered during receiving, preparation and/or analysis of these samples. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# AACI-ASTM D-5504.

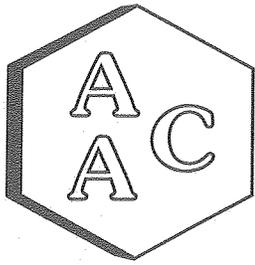
I certify that this data is technically accurate, complete and in compliance with the terms and conditions of the contract. The Laboratory Director or his designee, as verified by the following signature, has authorized release of the data contained in this hardcopy data package.

If you have any questions or require further explanation of data results, please contact the undersigned.


Marcus Hueppe
Laboratory Director

This report consists of 4 pages.





Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

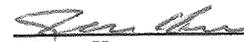
CLIENT : Eurofins Air Toxics, Inc.
PROJECT NO. : 160667
MATRIX : AIR
UNITS : ppmV

SAMPLING DATE : 05/12/2016
RECEIVING DATE : 05/16/2016
ANALYSIS DATE : 05/17/2016
REPORT DATE : 05/18/2016

Total Reduced Sulfur Compounds Analysis by ASTM D-5504

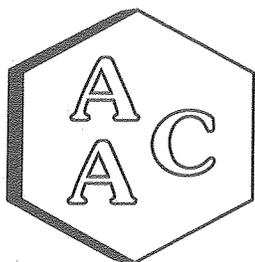
Client ID	D1 (162244)	U1 (162245)
AAC ID	160667-89826	160667-89827
Canister Dil. Fac.	1.5	1.4
Analyte	Result	Result
Hydrogen Sulfide	< 0.015	< 0.014
Carbonyl Sulfide	< 0.015	< 0.014
Sulfur Dioxide	< 0.015	< 0.014
Methyl Mercaptan	< 0.015	< 0.014
Ethyl Mercaptan	< 0.015	< 0.014
Dimethyl Sulfide	< 0.015	< 0.014
Carbon Disulfide	< 0.015	< 0.014
Isopropyl Mercaptan	< 0.015	< 0.014
tert-Butyl Mercaptan	< 0.015	< 0.014
n-Propyl Mercaptan	< 0.015	< 0.014
Methylethylsulfide	< 0.015	< 0.014
sec-Butyl Mercaptan	< 0.015	< 0.014
Thiophene	< 0.015	< 0.014
iso-Butyl Mercaptan	< 0.015	< 0.014
Diethyl Sulfide	< 0.015	< 0.014
n-Butyl Mercaptan	< 0.015	< 0.014
Dimethyl Disulfide	< 0.015	< 0.014
2-Methylthiophene	< 0.015	< 0.014
3-Methylthiophene	< 0.015	< 0.014
Tetrahydrothiophene	< 0.015	< 0.014
Bromothiophene	< 0.015	< 0.014
Thiophenol	< 0.015	< 0.014
Diethyl disulfide	< 0.015	< 0.014
Total Unidentified Sulfur	< 0.015	< 0.014
Total Reduced Sulfurs as H ₂ S	< 0.015	< 0.014

All compound's concentrations expressed in terms of H₂S (TRS does not include COS and SO₂)
 Sample Reporting Limit (SRL) is equal to Reporting Limit x Canister Dil. Fac. x Analysis Dil. Fac.



 Marcus Hueppe
 Laboratory Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report ASTM D-5504

Date Analyzed: 5/17/2016
Analyst: ZB
Units: ppbV

Instrument ID: SCD#10
Calb. Date: 3/14/2016

Opening Calibration Verification Standard

	Resp. (area)	Result	% Rec *	% RPD ****
Initial (H ₂ S)	6000	485	97.0	0.7
Duplicate (H ₂ S)	5967	482	96.5	0.2
Triplicate (H ₂ S)	5905	477	95.5	0.9

Method Blank

Analyte	Result
H ₂ S	<PQL

Duplicate Analysis

Sample ID 160667-89826

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H ₂ S	<PQL	<PQL	0.0	0.0

Matrix Spike & Duplicate

Sample ID 160667-89826

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H ₂ S	<PQL	250.0	229.5	226.0	91.8	90.4	1.5

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	% Rec **
H ₂ S	500.0	485.4	97.1

* Must be 95-105%, ** Must be 90-110%, *** Must be < 10%, **** Must be < 5% RPD from Mean result.
PQL = 10.0 ppbV as H₂S, MDL = 1.55 ppbV as H₂S


Marcus Hueppe
Laboratory Director



