Atmospheric Analysis & Consulting, Inc.

CLIENT	: Eurofins Air Toxics, Inc.
PROJECT NAME	: MO DNR – Bridgeton LF
AAC PROJECT NO.	: 160289
REPORT DATE	: 3/3/2016

On March 1, 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 (160340)	160289-87956	730.0
U1 (160341)	160289-87957	713.9

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.

ACCREDITED IN ACCORDANCE WITH nelac Certificate #E87837

1534 Eastman Ave., Ste. A • Ventura, • CA 93003 www.aaclab.com • (805) 650-1642 • FAX (805) 650-1644

LABORATORY ANALYSIS REPORT

CLIENT	**: Eurofins Air Toxics, Inc.**	**SAMPLING DATE**	**: 02/26/2016**
PROJECT NO.	**: 160289**	**RECEIVING DATE**	**: 03/01/2016**
MATRIX	**: AIR**	**ANALYSIS DATE**	**: 03/02/2016**
UNITS	**: ppmV**	**REPORT DATE**	**: 03/03/2016**

Total Reduced Sulfur Compounds Analysis by ASTM D-5504

Client ID	D1 (160340)	U1 (160341)
AAC ID	160289-87956	160289-87957
Canister Dil. Fac.	1.2	1.3
Analyte	Result	Result
Hydrogen Sulfide	< 0.012	< 0.013
Carbonyl Sulfide	< 0.012	< 0.013
Sulfur Dioxide	< 0.012	< 0.013
Methyl Mercaptan	< 0.012	< 0.013
Ethyl Mercaptan	< 0.012	< 0.013
Dimethyl Sulfide	< 0.012	< 0.013
Carbon Disulfide	< 0.012	< 0.013
Isopropyl Mercaptan	< 0.012	< 0.013
tert-Butyl Mercaptan	< 0.012	< 0.013
n-Propyl Mercaptan	< 0.012	< 0.013
Methylethylsulfide	< 0.012	< 0.013
sec-Butyl Mercaptan	< 0.012	< 0.013
Thiophene	< 0.012	< 0.013
iso-Butyl Mercaptan	< 0.012	< 0.013
Diethyl Sulfide	< 0.012	< 0.013
n-Butyl Mercaptan	< 0.012	< 0.013
Dimethyl Disulfide	< 0.012	< 0.013
2-Methylthiophene	< 0.012	< 0.013
3-Methylthiophene	< 0.012	< 0.013
Tetrahydrothiophene	< 0.012	< 0.013
Bromothiophene	< 0.012	< 0.013
Thiophenol	< 0.012	< 0.013
Diethyl disulfide	< 0.012	< 0.013
Total Unidentified Sulfur	< 0.012	< 0.013
Total Reduced Sulfurs as H_2S	< 0.012	< 0.013

All compound's concentrations expressed in terms of H_2S (TRS does not include COS and SO_2)
Sample Reporting Limit (SRL) is equal to Reporting Limit x Canister Dil. Fac. x Analysis Dil. Fac.

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Quality Control/Quality Assurance Report
ASTM D-5504

Date Analyzed: 3/2/2016
Analyst: ZB

Instrument ID: SCD#10
Calb. Date: 1/14/2016

Opening Calibration Verification Standard

	Resp. (area)	Result (ppbV)	% Rec *	% RPD ****
Initial	5207	499	99.8	NA
Duplicate	5270	505	101.0	1.2
Triplicate	5220	500	100.0	0.2

Method Blank

Analyte	Result
H2S	ND

Duplicate Analysis **Sample ID** 160289-87956 x1

Analyte	Sample Result	Duplicate Result	Mean	% RPD ***
H2S	0.0	0.0	0.0	0.0

Matrix Spike & Duplicate **Sample ID** 160289-87956 x2

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H2S	0.0	50.0	49.4	50.2	98.9	100.4	1.5

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result (ppbV)	% Rec **
H2S	500.0	511.7	102.3

** Must be 95-105%*
*** Must be 90-110%*
**** Must be < 10%*
***** Must be < 5% RPD from Initial result.*

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AAC Project No. 160289

CHAIN OF CUSTODY/ ANALYSIS REQUEST FORM

Client Name: MO DNR
Project Name: Bridgeton LF
Project Mgr (Print Name): Michael Parris
Project Number:
Sampler's Name (Print Name): Teresa Thevary
Sampler's Signature:

AAC Sample No.	Date Sampled	Time Sampled	Sample Type	Client Sample ID/Description	Type/No. of Containers	Analysis Requested: Pressurized	Pressurized	D-5504			
Can #917	2/26/15	1040-1125	Summa-Timed	D1 (160340)	-30 -5			X	87956		
Can #916	2/26/15	1050-1135	Summa-Timed	U1 (160341)	-30 -3			X	87957		

Send report:
Attn:
Phone#:
Fax#

Send invoice to:
Attn:
P.O. # 3ESP160540

Turnaround Time
24 - 48 Hr ____ 72 Hr ____
5 Day ✓ Normal ____
Other (Specify) ____

Special Instructions/remarks:
shipped via UPS
Tracking #
1ZR040W60296912718

Relinquished by (Signature):
Print Name: Teresa Thevary
Date/Time 2/26/16 1310
Received by (signature):
Print Name
3/1/16

Relinquished by (Signature):
Print Name:
Date/Time
Received by (signature):
Print Name 1255

UPS