

Atmospheric Analysis & Consulting, Inc.

CLIENT : Yorke Engineering
PROJECT NAME : Odor Sampling & Analysis
PROJECT NUMBER : 0357-007-01
AAC PROJECT NO. : 202180
REPORT DATE : 12/02/2020

On December 3, 2020, Atmospheric Analysis & Consulting, Inc. received one (1) Six-Liter Silonite Canister for Total Reduced Sulfur analysis by SCAQMD 307.91. Upon receipt, the sample was assigned a unique Laboratory ID number as follows:

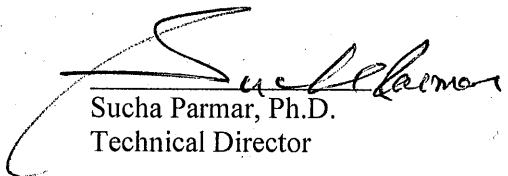
Client ID	Lab No.	Return Pressure (mmHg)
Inside AAA	202180-14979	673.0

This analysis is performed in accordance with AAC's Quality Manual. For detailed information pertaining to specific EPA, NCASI, ASTM and SCAQMD accreditations (Methods & Analytes), please visit our website at www.aaclab.com.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. No problems were encountered during receiving, preparation, and/or analysis of this sample.

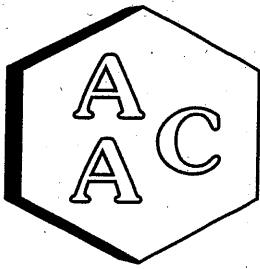
The Technical Director or his/her designee, as verified by the following signature, has authorized release of the data.

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


Sucha Parmar, Ph.D.
Technical Director

This report consists of 4 pages.





Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

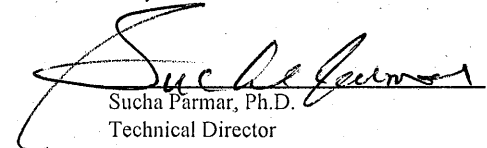
CLIENT : Yorke Engineering
 PROJECT NO. : 202141
 MATRIX : AIR
 UNITS : ppmV

SAMPLING DATE : 11/30/2020
 RECEIVING DATE : 12/03/2020
 ANALYSIS DATE : 12/03/2020
 REPORT DATE : 12/10/2020

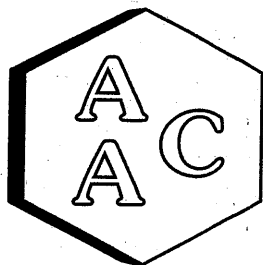
Total Reduced Sulfur Compounds Analysis by SCAQMD 307.91

Client ID	Inside AAA
AAC ID	202180-14979
Canister Dil. Fac.	1.5
Analyte	Result
Hydrogen Sulfide	< 0.002
COS / SO ₂	< 0.002
Methyl Mercaptan	< 0.002
Ethyl Mercaptan	< 0.002
Dimethyl Sulfide	< 0.002
Carbon Disulfide	< 0.002
Isopropyl Mercaptan	< 0.002
tert-Butyl Mercaptan	< 0.002
n-Propyl Mercaptan	< 0.002
Methylethylsulfide	< 0.002
sec-Butyl Mercaptan / Thiophene	< 0.002
iso-Butyl Mercaptan	< 0.002
Diethyl Sulfide	< 0.002
n-Butyl Mercaptan	< 0.002
Dimethyl Disulfide	< 0.002
2-Methylthiophene	< 0.002
3-Methylthiophene	< 0.002
Tetrahydrothiophene	< 0.002
Bromothiophene	< 0.002
Thiophenol	< 0.002
Diethyl Disulfide	< 0.002
Total Unidentified Sulfur	< 0.002
Total Reduced Sulfurs	< 0.002

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


 Sucha Parmar, Ph.D.
 Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report ASTM D-5504

Date Analyzed: 12/3/2020
Analyst: DL
Units: ppbV

Instrument ID: SCD#10
Calb. Date: 11/16/2020

Opening Calibration Verification Standard

576.8 ppbV H₂S (SSI227)

H ₂ S	Resp. (area)	Result	% Rec *	% RPD ****
Initial	4688	567	98.3	1.0
Duplicate	4752	575	99.7	0.4
Triplicate	4762	576	99.9	0.6

573.3 ppbV H₂S (SSI227)

MeSH	Resp. (area)	Result	% Rec *	% RPD ****
Initial	5555	574	100.1	0.3
Duplicate	5450	563	98.2	1.6
Triplicate	5606	579	101.0	1.2

509.8 ppbV H₂S (SSI227)

DMS	Resp. (area)	Result	% Rec *	% RPD ****
Initial	5768	493	96.6	1.4
Duplicate	5840	499	97.9	0.1
Triplicate	5937	507	99.5	1.5

Method Blank

Analyte	Result
H ₂ S	<PQL
MeSH	<PQL
DMS	<PQL

Duplicate Analysis

Sample ID 202150-14876

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

Matrix Spike & Duplicate

Sample ID 202150-14876 x10

Analyte	Sample Conc.	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD ***
H ₂ S	<PQL	288.4	290.4	288.1	100.7	99.9	0.8
MeSH	<PQL	286.6	281.2	279.8	98.1	97.6	0.5
DMS	<PQL	254.9	262.8	248.7	103.1	97.6	5.5

Closing Calibration Verification Standard

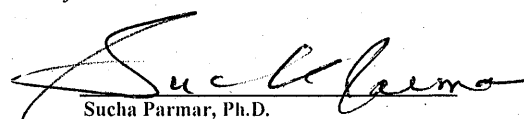
Analyte	Std. Conc.	Result	% Rec **
H ₂ S	576.8	571.8	99.1
MeSH	573.3	598.3	104.4
DMS	509.8	540.3	106.0

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

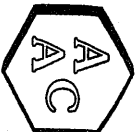
H₂S: PQL = 10.0 ppbV, MDL = 1.60 ppbV

MeSH: PQL = 10.0 ppbV, MDL = 1.60 ppbV

DMS: PQL = 10.0 ppbV, MDL = 1.60 ppbV


 Sucha Parmar, Ph.D.
 Technical Director





ATMOSPHERIC ANALYSIS & CONSULTING, INC.
 1534 Eastman Avenue, Suite A
 Ventura, California 93003
 Phone (805) 650-1642 Fax (805) 650-1644
 E-mail: info@aacclab.com

AAC Project No. 202180

Page 1 of 1

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Client Name Ninyo & Moore		Project Name Odor Sampling & Analysis		Send report:		
Project Mgr (Print Name) Keith Gilbert		Project Number 0357-007-01		Bipul Saraf BSaraf@YorkeEngr.com Attn:		
Sampler's Name (Print Name) Bipul Saraf		Sampler's Signature <i>Bipul K. Saraf</i>		Phone#: Fax#:		
AAC Sample No.		Date Sampled		Time Sampled		Send Invoice to:
14974		11/30-12/01		12:24 for 24h		Accounting@yorkeEngr.com
14980		11/30-12/01		14:10 for 24h		Attn:
						P.O. #
						Turnaround Time
						24-Hr _____ 48-Hr _____
						5 Day _____ Normal X
						Other (Specify) _____
						Special Instructions/remarks: -include all compounds per EPA TO-15 -include all compounds per EPA TO-11A -include all compounds per SCAQMD m307-91
Relinquished by (Signature):		Print Name: Bipul Saraf		Date/Time 12/20		Received by (signature):
Relinquished by (Signature):		Print Name:		Date/Time 12/20		Received by (signature):
						Print Name
						<i>Gabriel Raslar</i>

11/20/20 11:37