

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Phoenix

4625 East Cotton Ctr Blvd

Suite 189

Phoenix, AZ 85040

Tel: (602)437-3340

TestAmerica Job ID: 550-61583-1

TestAmerica Sample Delivery Group: Site #E1301520

Client Project/Site: DEC - Elmont 546

For:

New York State D.E.C.

625 Broadway

12th Floor

Albany, New York 12233-7017

Attn: Mr. Brian Jankauskas



Authorized for release by:

4/13/2016 9:58:35 AM

Carlene McCutcheon, Project Manager II

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Analyses included in this report were performed by TestAmerica Phoenix, 4625 E. Cotton Center Boulevard, Building 3, Suite 189, Phoenix, AZ 85040.

TestAmerica Phoenix (Lab ID 154268) is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation for the following methods:

NIOSH 0500, NIOSH 0600, NIOSH 1003, NIOSH 1005, NIOSH 1007, NIOSH 1010, NIOSH 1015, NIOSH 1022, NIOSH 1300, NIOSH 1400, NIOSH 1401, NIOSH 1403, NIOSH 1405, NIOSH 1450, NIOSH 1457, NIOSH 1500, NIOSH 1501, NIOSH 1550, NIOSH 1602, NIOSH 1604, NIOSH 1606, NIOSH 1609, NIOSH 1610, NIOSH 1611, NIOSH 1613, NIOSH 1615, NIOSH 2000, NIOSH 2016, NIOSH 2532, NIOSH 2546, NIOSH 2551, NIOSH 5000, NIOSH 5039, NIOSH 5503, NIOSH 5506, NIOSH 5523, NIOSH 5600, NIOSH 6006, NIOSH 6009, NIOSH 6010, NIOSH 6013, NIOSH 7300, NIOSH 7303, NIOSH 7600, NIOSH 7903, NIOSH 9100, NIOSH 9102, EPA IP-6A, EPA IP-6C, OSHA 7, OSHA 42, OSHA 47, OSHA 48, OSHA 64, OSHA 69, OSHA 111, OSHA ID-121, OSHA ID-125G, OSHA ID-140, OSHA ID-188, OSHA ID-215, OSHA 1001, OSHA 1002, OSHA 1003, OSHA 1004, OSHA 1005, OSHA 1007, OSHA 1009, OSHA 1014 and OSHA Chemical and Sampling Information for Silane. Volatile organic compounds on 3M Organic Vapor Monitors, Assay Technology Passive Monitors and SKC Passive Monitors. Formaldehyde and other aldehydes and ketones on Assay Technology passive monitor and SKC Umex 100 passive sampler by EPA TO-11A and OSHA 1007. Radiello diffusive sampler for hydrogen sulfide.

TestAmerica Phoenix also holds NELAC accreditation through the State of Oregon (AZ100001) for the analytical techniques noted on the scope of accreditation and the State of New York (11898) for NIOSH 6009, NIOSH 7300, EPA TO-10A, EPA TO-11A and EPA TO-17.

Analytical Comments:

Unless otherwise noted, all method blanks and laboratory control spikes met method and/or laboratory quality control objectives for the analyses included in this report.

Unless otherwise noted, sample results have been corrected for method blank values.

NIOSH Method 7300 analyses are performed using a modified digestion procedure to eliminate the use of perchloric acid.

Carlene McCutcheon
Project Manager II
4/13/2016 9:58:35 AM

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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Job ID: 550-61583-1

Laboratory: TestAmerica Phoenix

Narrative

Job Narrative
550-61583-1

Comments

No additional comments.

Receipt

The samples were received on 4/9/2016 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.7° C.

Industrial Hygiene

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-61583-1	Upwind	Air	04/06/16 00:00	04/09/16 09:35
550-61583-2	Downwind - 1	Air	04/06/16 00:00	04/09/16 09:35
550-61583-3	Downwind - 2	Air	04/06/16 00:00	04/09/16 09:35
550-61583-4	Personnel	Air	04/06/16 00:00	04/09/16 09:35

Detection Summary

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Client Sample ID: Upwind

Lab Sample ID: 550-61583-1

No Detections.

Client Sample ID: Downwind - 1

Lab Sample ID: 550-61583-2

No Detections.

Client Sample ID: Downwind - 2

Lab Sample ID: 550-61583-3

No Detections.

Client Sample ID: Personnel

Lab Sample ID: 550-61583-4

Analyte	Result ug/Sample	Result mg/m3	Result Qualifier	RL ug/Sample	Dil Fac	Method	Prep Type
Total Particulate Matter	130	0.181		100	1	0500	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Phoenix

Client Sample Results

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Client Sample ID: Upwind

Date Collected: 04/06/16 00:00

Date Received: 04/09/16 09:35

Sample Air Volume: 756 L

Lab Sample ID: 550-61583-1

Matrix: Air

Sample Container: IH - PVC, 5 um, 37-mm, 3-PC, Pre-weighed

Method: 0500 - NIOSH 0500 (Modified)

Analyte	Result ug/Sample	Result mg/m3	Result Qualifier	RL ug/Sample	Prepared	Analyzed	Dil Fac
Total Particulate Matter	<100	<0.132		100		04/11/16 16:02	1

Client Sample ID: Downwind - 1

Date Collected: 04/06/16 00:00

Date Received: 04/09/16 09:35

Sample Air Volume: 756 L

Lab Sample ID: 550-61583-2

Matrix: Air

Sample Container: IH - PVC, 5 um, 37-mm, 3-PC, Pre-weighed

Method: 0500 - NIOSH 0500 (Modified)

Analyte	Result ug/Sample	Result mg/m3	Result Qualifier	RL ug/Sample	Prepared	Analyzed	Dil Fac
Total Particulate Matter	<100	<0.132		100		04/11/16 16:02	1

Client Sample ID: Downwind - 2

Date Collected: 04/06/16 00:00

Date Received: 04/09/16 09:35

Sample Air Volume: 756 L

Lab Sample ID: 550-61583-3

Matrix: Air

Sample Container: IH - PVC, 5 um, 37-mm, 3-PC, Pre-weighed

Method: 0500 - NIOSH 0500 (Modified)

Analyte	Result ug/Sample	Result mg/m3	Result Qualifier	RL ug/Sample	Prepared	Analyzed	Dil Fac
Total Particulate Matter	<100	<0.132		100		04/11/16 16:02	1

Client Sample ID: Personnel

Date Collected: 04/06/16 00:00

Date Received: 04/09/16 09:35

Sample Air Volume: 720 L

Lab Sample ID: 550-61583-4

Matrix: Air

Sample Container: IH - PVC, 5 um, 37-mm, 3-PC, Pre-weighed

Method: 0500 - NIOSH 0500 (Modified)

Analyte	Result ug/Sample	Result mg/m3	Result Qualifier	RL ug/Sample	Prepared	Analyzed	Dil Fac
Total Particulate Matter	130	0.181		100		04/11/16 16:02	1

QC Sample Results

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Method: 0500 - NIOSH 0500 (Modified)

Lab Sample ID: MB 550-87221/1

Matrix: Air

Analysis Batch: 87221

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Particulate Matter	<100		100	ug/Sample			04/11/16 16:02	1

Lab Sample ID: LCS 550-87221/2

Matrix: Air

Analysis Batch: 87221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Particulate Matter	200	201.0		ug/Sample		100	35 - 137

Lab Sample ID: LCSD 550-87221/3

Matrix: Air

Analysis Batch: 87221

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Particulate Matter	200	198.0		ug/Sample		99	35 - 137	2	47

QC Association Summary

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

IH - General Chemistry

Analysis Batch: 87221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-61583-1	Upwind	Total/NA	Air	0500	
550-61583-2	Downwind - 1	Total/NA	Air	0500	
550-61583-3	Downwind - 2	Total/NA	Air	0500	
550-61583-4	Personnel	Total/NA	Air	0500	
LCS 550-87221/2	Lab Control Sample	Total/NA	Air	0500	
LCSD 550-87221/3	Lab Control Sample Dup	Total/NA	Air	0500	
MB 550-87221/1	Method Blank	Total/NA	Air	0500	

Lab Chronicle

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Client Sample ID: Upwind

Date Collected: 04/06/16 00:00

Date Received: 04/09/16 09:35

Lab Sample ID: 550-61583-1

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	0500		1	87221	04/11/16 16:02	CDC	TAL PHX

Client Sample ID: Downwind - 1

Date Collected: 04/06/16 00:00

Date Received: 04/09/16 09:35

Lab Sample ID: 550-61583-2

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	0500		1	87221	04/11/16 16:02	CDC	TAL PHX

Client Sample ID: Downwind - 2

Date Collected: 04/06/16 00:00

Date Received: 04/09/16 09:35

Lab Sample ID: 550-61583-3

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	0500		1	87221	04/11/16 16:02	CDC	TAL PHX

Client Sample ID: Personnel

Date Collected: 04/06/16 00:00

Date Received: 04/09/16 09:35

Lab Sample ID: 550-61583-4

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	0500		1	87221	04/11/16 16:02	CDC	TAL PHX

Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Certification Summary

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Laboratory: TestAmerica Phoenix

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA-LAP, LLC	IHLAP		154268	07-01-17

Method Summary

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Method	Method Description	Protocol	Laboratory
0500	NIOSH 0500 (Modified)	NIOSH	TAL PHX

Protocol References:

NIOSH = NIOSH Manual Of Analytical Methods, National Institute For Occupational Safety And Health, 4th Edition, August 1994.

Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 550-61583-1

SDG Number: Site #E1301520

Login Number: 61583

List Number: 1

Creator: Doerr, Bret C

List Source: TestAmerica Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	No analysis requiring residual chlorine check assigned.

Measurement Uncertainty Summary

Client: New York State D.E.C.
Project/Site: DEC - Elmont 546

TestAmerica Job ID: 550-61583-1
SDG: Site #E1301520

Analysis Method	Prep Method	Analyte	Percent Uncertainty (+/-)
0500		Total Particulate Matter	33.0

The uncertainty values represent an expanded uncertainty using a coverage factor of $K = 2$ to approximate a 95% confidence interval.